

## ABSTRACT

Title of Dissertation:       DIFFERENTIAL EFFECTS OF INSTITUTIONAL  
SOCIALIZATION ON VALUE ORIENTATIONS IN  
NAVAL ACADEMY MIDSHIPMEN

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Organizations are thought to influence the values, attitudes, and behaviors of members through processes of indoctrination and socialization. Military organizations also are believed to influence members by essentially “transforming” individuals from civilian life into part of an effective fighting machine. However, the process by which that occurs and the relative outcomes have not been fully understood. This problem is important because of the role the military plays as a professional, work, and social context for millions of people. The problem is addressed by analyzing the professional socialization to military service of midshipmen attending the United States Naval Academy. This research occurs at the nexus of organizational and professional socialization, the effects of college, identity theory, and the occupational or work orientations of youth. A model of organizational socialization and value congruence predicted the orientations of

incoming midshipmen and compared them to groups of civilian high school seniors as well as to groups of midshipmen with greater time in the organization. Significant differences in the orientations of incoming midshipmen and civilian peers were observed, indicative of the self-selection and anticipatory socialization effects associated with organizational entry. In addition, incoming midshipmen differed significantly from midshipmen with greater tenure in the organization, highlighting a trend from newcomer idealism toward more realistic occupational orientations in seniors about to graduate and begin military work. The findings are important because greater congruence or “fit” in organizational and individual orientations produced the most positive outcomes, including the most certain military career plans. Longitudinal evidence of greater congruence or “fit” occurred in midshipmen who possessed a strong personal identity associated with work and military service. The most significant predictors of this identity or “professional military career orientation” were strong work beliefs, high officer role identity, and the belief that military service is important. Midshipmen with better organizational “fit” expressed the most positive attitudes about the military, were more likely to see themselves working in the military at age 30, expected greater satisfaction with military work, and expressed greater certainty in their plans for a military career. Recommendations to foster a “professional military career orientation” in midshipmen are provided.

DIFFERENTIAL EFFECTS OF INSTITUTIONAL SOCIALIZATION ON VALUE  
ORIENTATIONS IN NAVAL ACADEMY MIDSHIPMEN

by

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Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2004

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## DEDICATION

This paper is dedicated to Captain Bob Erskine, U.S. Navy (Retired), for leading by example and living with character. Your lessons will last a lifetime.

## ACKNOWLEDGEMENTS

I would like to acknowledge Dr. David R. Segal, committee chair, advisor, teacher, mentor, and friend. Your patience and guidance helped me form my ideas into questions and my questions into answers and made a better researcher and scholar of me. I would also like to thank the members of my dissertation committee for their expert advice, counsel, and encouragement throughout the process. In addition, a special thank you is due to Dr. Linda Mallory of the USNA Office of Institutional Research for her commitment to fostering quality research and her tireless support of the data collection that made the Midshipman Attitude Survey and this research possible. Finally, without the love, support, and encouragement of Robin, my wife, and our children Phillip, Tyler, and Gill, this project would never have been completed. It has been a blessing to spend this time at home with all of you.

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## Chapter 1 Introduction

Organizations are thought to influence the values, attitudes, and behaviors of members through processes of indoctrination and socialization (Caplow 1964; Fogarty and Dirsmith 2001). A conventionally accepted belief is that military organizations influence members by essentially “transforming” individuals from civilian life into part of an effective fighting machine.<sup>1</sup> However, the process by which that occurs and the relative outcomes are challenged often, or at least not fully understood (Arkin and Dobrofsky 1990; Bachman, Sigelman, and Diamond 1987; Faris 1976). This particular problem is important because of the unique role of military organizations as professional, work, and social contexts. The primary goal or “work” of the U.S. military organization is to protect and support, from external threats, the interests of the state (Secretary of Defense 2003), but the military institution is also embedded in the social, industrial, political, and educational structure of society (Burk 2001; Holsti 2001). Notwithstanding the traditional purpose or goal of the military organization and its apparent role in transforming new members, the military is also a series of complex and differentiated social groups and subgroups that serve as work, social, and living contexts for nearly 4 million military, civil service, and contract workers and their family members (Statistical Information Analysis Division 2004). Sociological questions arising from such considerations of military work are how and to what extent individuals enter this organizational context from society, participate in its myriad social relations, and as

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<sup>1</sup> Recruiting slogans such as, “Be all that you can be”, “The Army will make a man out of you” and “Once a Marine, always a Marine” suggest, at least, a transformational experience or substantial growth occurs through service in the armed forces (Arkin and Dobrofsky 1990).

conventionally argued, assimilate or become socialized to the orientations of the organization.

These questions can be addressed in terms of organizational socialization, defined as a process by which individuals are exposed to new organizational or social environments and to the norms and behaviors that systematize and promote interpretation of different or more complex experiences and relationships (Fogarty and Dirsmith 2001). Stated differently, organizational socialization is a process of mutual adjustment that reduces uncertainty in tasks and environments by creating common behaviors and shared orientations among members (Fogarty and Dirsmith 2001; Jones 1983; Kraimer 1997; Moreland and Levine 2001; Wanous and Reichers 1984).

The study of military organizations as a social context and workplace utilizes organizational socialization theory to understand the “transformational” experience of entering the military and the interactions of newcomers within groups and larger military organizations (Caforio 1998; Segal and Segal 1993). These experiences and interactions have been studied through the values, attitudes, and normative expectations for behavior of military personnel (Segal and Segal 1993), more generally termed orientations.

Values as understood here are enduring and centralized beliefs about culturally preferred ends of social activity or the means toward such idealized ends (Rokeach 1970; Spates 1983). Because of their centrality and stability, values are an important aspect of the self-concept and are considered determinants of favorable attitudes or evaluations of objects that are related to valued means or ends (Braithwaite and Scott 1991). Military values historically have been centered on the ideal of honor, including conceptions of honorable behavior, obedience, loyalty, and achievement (Janowitz 1960). The values

associated with the military are stated in contrast to the dominant values of civilian society that are centered on equality, freedom, and individualism (Coates and Pellegrin 1965).

Some of the earliest and classic arguments regarding the desired transformational outcomes, or orientations of military personnel emerge from Huntington (1957) and Janowitz (1960) and their idealizations of military values and the officer profession. On the one hand, Huntington believed the most effective military was one separate from civilian values, enabling it to maximize professional expertise, while Janowitz argued against a distinctly military culture, contending that the military profession and its values ought to converge with the values of civilian society (Holsti 2001). More recently, scholars have provided evidence of “value diversity” in the military, proposing instead that a range of orientations both ensures attachment to and adequate representativeness of civilian society (Bachman, Blair, and Segal 1977; Segal, Freedman-Doan, Bachman, and O'Malley 2001).

The question of values is also central to the debate between proponents of “new” and “old” institutional forms of organization. The organization is defined as a “system of coordinated and controlled activities that arise when work is embedded in complex networks of technical relations and boundary-spanning exchanges” (Meyer and Rowan 1977:340). In other words, organizations are complex and differentiated social groups and subgroups that have normative social structures and systems of inter- and intra-group relations (Turner and Haslam 2001). By institutional it is meant that organizational values, such as those in the military, take on larger, broadly accepted “social fact” qualities and become anchored in and identified with the formal structure and processes

of the organization apart from any original terminal purposes the values served (Selznick 1996; Zucker 1987).<sup>2</sup>

According to the “old” institutionalism, the wide acceptance and transference of values to organizational structure creates normative order and predictability (Selznick 1996) while for “new” institutionalism, organizational values are a means of reacting to and interacting with the macro-organizational environment in order to “legitimate” the organization and maintain social acceptance (Meyer and Rowan 1977; Selznick 1996). Socialization is viewed by both “old” and “new” institutionalism as an important determinant of organizationally sanctioned orientations and behaviors, termed values and attitudes or “cognitive schemas” (Fogarty and Dirsmith 2001).

### **Study Background and Theoretical Framework**

While the larger debates on the theoretical underpinnings of institutional influences on organizational values and the political and policy implications of differences in military and civilian values remain important issues, a substantial portion of research dealing with orientations and organizational socialization in the military is focused at a lower level of abstraction. This research addresses practical questions related to differences in individual orientations in military and civilian populations (Bachman et al. 1977; Bachman et al. 1987; Gronke and Feaver 2001; Kilburn and Asch 2003; National Research Council 2003). The methodological and, to some extent, theoretical underpinnings of much of this research on individual-level orientations in the

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<sup>2</sup> For example, the Navy values of “Honor, Courage, and Commitment” and the Army values of “Duty, Honor, Country” become identified more with the organizational culture than with the behavior of organization members.

military can be found in the applied social psychological work on reference groups<sup>3</sup> and organizational socialization both during and immediately following World War II<sup>4</sup> (Bogart 1969; Merton and Kitt 1950; Shils 1950; Stouffer 1950; Stouffer et al. 1950; Stouffer et al. 1965; Stouffer, Suchman, DeVinney, Star, and Williams 1965; Williams 1998), and continuing to the present in many areas, including organizations, socialization, and interactionism (i.e., groups, self, and identity) (Bachman, Segal, Freedman-Doan, and O'Malley 2000; Caplow 1964; Coates and Pellegrin 1965; Faris 1976; Gecas and Burke 1995; Janowitz 1960; Janowitz 1964; Merton and Kitt 1950; Priest, Fullerton, and Bridges 1982; Segal and Segal 1983; Vidich and Stein 1960; Woodruff 2003).

A recurring finding throughout much of the research on individual orientations in the military states that while there are similarities, many differences exist in the values, attitudes, and preferences of military personnel compared to those of the broader civilian population (Bachman, Freedman-Doan, and O'Malley 2000a; Bachman, Freedman-Doan, Segal, and O'Malley 2000; Kilburn and Asch 2003; National Research Council 2003; Segal, Bachman, Freedman-Doan, and O'Malley 1999; Segal et al. 2001). Related findings highlight the differentials that emerge in subgroups of the military, such as between officers and enlisted personnel or differences by gender, race, and cohort (Bachman et al. 1977; Butler 1999; Herbert 1998; Moskos 1970; Moskos and Butler

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<sup>3</sup> The reference group is an important concept in the literature on socialization (Kemper 1968) and is defined herein as a group that an individual takes account of when considering different courses of action or when orienting individual behavior and attitudes. Types of reference groups are *normative*, or groups that provide specific norms and values which the individual must follow or reject; *comparison groups* that provide frames of reference for decision-making and judgment and offer relative evaluation of performance and rewards; and *audience groups* that infer values and behavior to the individual, but neither demand compliance nor notice the individual's behavior (Kemper 1968)

<sup>4</sup> Although reference group theory was not conceptualized until later (Merton and Kitt 1950; Shils 1950; Singer 1990), the research on relative deprivation and promotion rates in Army units and the mass survey research methods documenting indoctrination to military service and combat experiences during WWII broke new ground in the social sciences (Speier 1950; Stouffer 1950; Williams 1998).



1996; Segal 1989; Segal 1990; Stiehm 1989). When highlighting the observed distinctions, researchers have sought to determine whether such differences are the result of self-selection by certain individuals to the military or through a process of socialization and development occurring in the context of this environment (Bachman et al. 1987; Franke 2000; Hammill, Segal, and Segal 1995; Segal et al. 2001; Snider, Priest, and Lewis 2001).

While much of the associated research is focused on outcomes and policy implications attendant with observed racial, gender, and civilian-military differences (Armor 1996; Moore and Webb 2000; Segal 1999), a substantial portion identifies and investigates the processes by which individual orientations are formed and changed in the military (Arkin and Dobrofsky 1990; Bachman et al. 2000; Dornbusch 1955; Franke 2000; Guimond 1995; Lovell 1979; Stevens and Rosa 1994). This research engages the latter of the two research currents by investigating the extent to which a military organization influences the orientations (values, attitudes, normative expectations for behavior, plans, and preferences) of its members.

### **Research Problem**

The framework for this study encompasses two aspects of the social world, the military as an organizational or work context and the members of that organization.<sup>5</sup> Parsons (1964:33), an “old” institutionalist, distinguished the organization from other social entities by its “primacy of orientation to the attainment of a specific goal” while Meyer and Rowan (1977:340) define the organization as a “system of activities” in

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<sup>5</sup> Sociologists often use the terms organization and institution, or even establishment interchangeably when referring to goal-oriented social units (Etzioni 1964). See for example, Becker (1964), Goffman (1964) and Janowitz (1964). While many of the general orientations and preferences addressed in this research are referenced to the military as an institution, this study will concentrate on related organizational-level processes and individual-level outcomes.

“complex networks” associated with work. Parsons stated that the goal of an educational organization, for instance, might be to produce students with a certain “trained capacity” after being subjected to the organization’s influence. Likewise, Parsons (1964:33-34) in the form of “old” institutionalism argued that the value pattern of the organization (ordinarily related to primary organizational goals) defines the orientation of that social system and guides, or influences, the activities of the organization and its members. “New” institutionalism, however, argues that policies, norms and values become ritualized and formally incorporated into structure as a means of legitimating the organization to society and to similar organizations (Meyer and Rowan 1977; Zucker 1987). As a result of this emphasis on social legitimization, institutionalized values become less associated with the terminal goals, products, or services of the organization and the tangible outputs of the organization occur through informal “decoupled” arrangements (DiMaggio and Powell 1983; Meyer and Rowan 1977; Selznick 1996; Zucker 1989).

While it can be argued that the values of the military take on a mythical or institutionalized character and are prominent in the social legitimacy of the organization, it can also be argued that ideals such as honor, obedience, loyalty, and achievement have a place in the context of military work and, thus, facilitate the terminal goals of the organization. Likewise, research has shown that military organizations are comprised of individuals and groups that embody a range of organizational values (Bachman et al. 2000; Segal et al. 2001). De-emphasizing the importance and diversity of individual and group level values in the military as solely symbolic ignores the contribution of groups and individuals to the instrumental purpose of the military (Fogarty and Dirsmith 2001).

Therefore, this project approaches the problem of organizational socialization of values and orientations from the perspective of “old” institutionalism. Furthermore, the conventional assumption that organizations influence or socialize their members’ activities establishes the basis for the general research problem in this study – **to determine the extent of influence, if any, that a military organization exerts over the orientations of its members and the conditions under which this occurs.**

In a study of military organization, authority, and hierarchy, Janowitz (1964:212) identified the organizational goals of the “modern” military to be preparation for combat as well as maintaining a “stable and purposeful involvement” by individuals throughout the organization.<sup>6</sup> To meet the military organization’s need for obedience and conformity, yet innovation and action in combat, processes of socialization and training exist to bring in new members to the organization and influence those currently in the organization. While the total depth and myriad conditions defining organizational socialization of individuals in the military are too large a scope for a single work, an investigation of a small portion of the field is attainable and is accomplished by studying one particular context of organizational socialization, midshipmen at the United States Naval Academy.<sup>7</sup>

Since its establishment at Fort Severn on the banks of the Severn River in Annapolis, Maryland in October 1845, the Naval Academy has served as the nation’s premier means of producing officers for service in the Navy and Marine Corps

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<sup>6</sup> For further discussion of the changing nature of the modern military organization and the influence on individual action, see Segal and Segal (1983).

<sup>7</sup> The United States Naval Academy is identified by its location in Annapolis, Maryland in the same manner that the United States Military Academy is called West Point. In this paper, the organization will be referred to as the Naval Academy or the Academy.

(Sweetman 1995).<sup>8</sup> While the architecture and curriculum have changed considerably over time, the basic goal of the service academy has remained relatively constant, as Janowitz (1960:128) termed it, “initiation of the officer recruit”. The published mission, or organizational goal, of the Naval Academy highlights the essence of this “initiation”, or organizational socialization process:

To develop midshipmen morally, mentally and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to provide graduates who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship and government (Office of the Superintendent 2002-2003).

The service academy, unlike other sources of assimilation to the military organization, is thought to develop a corps of well educated, highly trained, committed, and loyal leaders in the profession of arms (Dornbusch 1955; Franke and Heinecken 2001; Office of the Superintendent 2002-2003). Thus, not only does this organization claim to initiate individuals to an institutional value system, but it also seeks to educate them and prepare them for the assumption of future military leadership roles in a specific occupational setting.

Students attending the Naval Academy are called midshipmen and collectively they are part of the Brigade of Midshipmen. The position or relative status of midshipmen increases during each of the four academic years in residence along the Severn River, beginning as a freshman or Fourth Class midshipman (also called a Plebe), transitioning from a newcomer to a full-fledged member of the organization as a sophomore or Third Class midshipman. In the third year of residence the Second Class midshipmen incur a mandatory military service obligation and effectively become

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<sup>8</sup> The author of this dissertation graduated from the Naval Academy in 1983 and has served continuously on active duty since that time.

“upperclass” as they begin to assume greater responsibility for leading underclass midshipmen. The four years at Annapolis culminate as a senior or First Class midshipman. First Class midshipmen hold the highest positions of leadership and responsibility within the Brigade and in May of each year, the graduating seniors are commissioned as officers in the armed forces of the United States.

The service academy, a unique educational and occupational training environment, is organized to support its mission as both an undergraduate college and a military indoctrination organization. The Naval Academy is headed by the Superintendent (similar to the president of a college or university), a senior military officer in the rank of vice admiral, while the Commandant of Midshipmen, another senior military officer typically below the rank of admiral, handles the day to day leadership of the student population (Office of the Superintendent 2003; Sweetman 1995). The academic and professional instruction of midshipmen is divided, respectively between the Academic Dean, a civilian government employee, and the Commandant of Midshipmen (Secretary of the Navy 1996; Sweetman 1995).

Each year, the Naval Academy draws applicants from all 50 States in the Union, the District of Colombia, and U.S. Territories as well as from several foreign nations (Office of the Superintendent 2003). The applicants come from a variety of backgrounds and possess a range of characteristics and abilities, but the overall applicant pool to the Naval Academy comprises some of the most highly qualified college bound young men and women in the nation. For example, the Class of 2007 had a mean total SAT score 1285 and 94% of entering midshipmen were in the top 2/5 of their high school class, more than 50% were members of student government and National Honor Society, and

nearly 90% of these new midshipmen were high school varsity athletes (Office of Institutional Research 2003).

Not only is the student population highly qualified, the selection process to the Naval Academy is extremely competitive. As an example of the admissions process, among the entering Class of 2007 there were more than 14,000 applicants, of which about 32 percent received official nominations from sources such as The President and Vice President, Members of Congress, the Secretary of the Navy, and the Superintendent of the Naval Academy (Office of Institutional Research 2003). From that total, only 2,100 individuals were designated as fully qualified academically and physically and 1,479 were ultimately granted offers of admission, for an admissions rate of ten percent (Office of Institutional Research 2003). Finally, of the more than 14,000 initial applications to the Naval Academy, the Class of 2007 inducted 1,228 new midshipmen on Induction Day in July of 2003 (Office of Institutional Research 2003).

Another defining characteristic of the Naval Academy is that the student population is overwhelmingly male and Caucasian. As an example, the entering Class of 2007 included 16.7% women and 24.6% minorities and of those minority midshipmen entering the Academy 37% were Hispanic, 20% were Asian American, and 33% were African American (Office of Institutional Research 2003). Equally important as the number of civilians who entered the organization are those who departed the organization and returned to civilian life before graduating. The overall attrition rate at the Naval Academy for the five-year period from 1999-2003 was 21.8%, while the attrition rate at West Point was 20.2% and at the Air Force Academy it was 24.9%. The attrition rate for women at the Naval Academy over the same five-year period was 29.9%, the attrition

rate for African Americans was 29.8%, for Hispanics it was 25.5%, and for Asian Americans it was 20.8% (Office of Institutional Research 2003).

For those midshipmen who remain at the Naval Academy to graduation, the organizational goal is the education and training of them as leaders and military officers. In this organizational outcome there is both an individual value dimension and an occupational or work dimension. As stated in the Naval Academy mission, graduates are expected to possess and exhibit certain leadership characteristics, or values, as well as be capable *and willing* to fill leadership roles in the military. In the naval service, leadership roles are played out in a variety of occupations and contexts, but predominately in Navy ships, submarines, and aircraft squadrons, as well as in Marine Corps combat units. For the graduating Class of 2003, 96% of the newly commissioned ensigns and second lieutenants entered the combat arms communities of the Navy and Marine Corps (Office of Institutional Research 2003).

In order to accomplish its stated goals, the Naval Academy must then create and/or shape a unique identification with military values and instill preferences for the various leadership roles and work associated with a career in the armed forces (Dornbusch 1955; Lovell 1979). The goal of this study is to investigate the unique process of organizational socialization to orientations and military role identity formation that occurs at this military college. Role identity is understood to mean the internalized aspects, or “designations” of the self that are associated with “structured role relationships” such as mother, son, or in this case, midshipman, future military officer, leader, or service member (Stryker 1990). In sum, this research centers on the extent to which the Naval Academy provides graduates with or fosters a professional military

career orientation comprised of the importance individuals attach to military service and work and the role identities associated with such work. As such, this research focuses on individual beliefs and values about work, military attitudes, and role identities associated with military service and their relationship to a primary outcome of organizational socialization, military career expectations.

### **Research Questions**

The research question addressed in this study asks: **“What effect, if any, does attending the United States Naval Academy have on individual identification with institutional and work-related value orientations, attitudes, and role-related behaviors and preferences?”** One common approach to answering this question is drawn from Goffman’s (1960:451) concept of the “total institution” and its relationship to the military’s socializing effects. A “total institution” is thought to be an organization that creates an environment and/or series of experiences that force change and conformity in individuals to institutionally defined values and normative behaviors (Goffman 1960:451). The military is argued to be a “total institution” because of its tendency to break down the barriers that separate the spheres of ordinary life for individuals. Goffman (1960:451) lists the following ways in which these barriers are broken down.

- All aspects of life are conducted in the same place, under the same authority
- All daily activity is carried out together with a similarly treated group of others
- All daily activities are tightly scheduled, hierarchically imposed, and governed by explicit rules and separate officials
- The enforced activities are a coordinated, intentional, and rational plan in support of the official institutional objectives

As the entry point to the organization, initial military training (e.g., enlisted boot camp, officer candidate training, or military service academy plebe summer) is an



intensive and severe socialization and training process, much like the “total institution.” In this sense, prior identities and orientations are left behind and new social definitions and behavioral expectations of the military are imparted on the enlisted recruit or officer candidate (Arkin and Dobrofsky 1990; Dornbusch 1955; Faris 1976). In reality, the military of today, aside from the initial training period, resembles Goffman’s “total institution” very little (Rosa and Stevens 1986). As a result, explanations of the military’s socializing effects must incorporate a broader understanding of both the organization and individual in creating and maintaining the socialization experience (Jones 1986).

Although less severe and overt, the military socialization process continues after introductory (or basic) training and follows a cycle of role development and then recruitment, selection (and sometimes de-selection), and training for new military roles and identities (Janowitz and Little 1974). In outlining this process, Janowitz and Little (1974) emphasize the important role military service academies play in the formation of values and identities in professional military officers. In this case, the service academy indoctrinates civilian youth to military life (albeit in a college campus environment), to basic military values, and to the personal role of cadet or midshipman.

In addition to completing an undergraduate degree in a major field of study like other colleges, the service academy educates students to a set of core military and academic course requirements designed to prepare them for future work roles as officers and leaders (Schein 1967; Secretary of the Navy 1996). However, socialization in a

military college environment is not limited to the four Federal Service Academies.<sup>9</sup>

Numerous other State and private military colleges have similar socialization programs and graduate large numbers of students into the officer corps of the military.<sup>10</sup> Likewise, the diverse and active field of research on the development and socialization of youth in college includes educational, personal, and occupational considerations, among others (Astin 1993; Evans, Forney, and Guido-DiBrito 1998; Pascarella and Terenzini 1991). Research also has shown that the process of socialization is not uni-dimensional with the individual as passive recipient (Jones 1986). Individuals bring prior orientations to the socialization process to help them make sense of the new situation. They accept or reject the socialization and, if accepted, ultimately provide input back to the organization in the form of academic work and participation in activities and organizationally endorsed behaviors (Jones 1983; Jones 1986). Jones (1986) suggests that this interactive process of organizational socialization demonstrates the need for research at both the individual and organizational levels.

Therefore, the framework for the present study concerns the education and socialization of midshipmen to a military occupation and role. Through the organizational context of the Naval Academy, this research investigates the variables, constructs, and organizational outcomes commonly considered in such research. The following additional research questions are derived from the primary question to study the effects of organizational socialization on midshipmen orientations and specify the

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<sup>9</sup> The four Federal Service Academies include: The U. S. Military Academy at West Point, NY, The U. S. Naval Academy in Annapolis, MD, The U. S. Coast Guard Academy in New London, CT, and the U. S. Air Force Academy in Colorado Springs, CO.

<sup>10</sup> The Reserve Officer Training Corps (ROTC) at civilian colleges and military education programs at schools that are not federal, such as The Citadel, The Virginia Military Institute (VMI), and the Corps of Cadets at Texas A&M also incorporate indoctrination to military culture and serve as another means of officer accession to the military.

relationships, contexts, and individual and organizational outcomes to be addressed in this study. They are:

1. What, if any, differences are there in the job values, work beliefs, and military attitudes expressed by incoming midshipmen and civilian high school seniors?
2. What effect, if any, do experiences prior to entering the academy and the length of time spent at the academy have on job values, work beliefs, military attitudes, and military role identities expressed by midshipmen?
3. What effect, if any, does the type and form of professional training and socialization have on the job values, work beliefs, and military role identities of midshipmen?
4. What is the relationship between the job values, work beliefs, military attitudes, and military role identities of midshipmen and their role related behaviors, occupational plans, and preferences and is there an associated organizational socialization effect?

Question number one is addressed by studying the orientations of incoming freshmen, or Plebe midshipmen at the Naval Academy and those of civilian high school peers. Questions 2 through 4 are investigated through both longitudinal and cross-sectional data on the orientations of midshipmen at various points in the Naval Academy socialization process. Through secondary analysis of survey and demographic data, this study assesses the argument that military organizations socialize members to a different set of value orientations, role identities, and occupation preferences. The extent to which differential effects exist in the military and civilian samples and emerge in the military samples over time and across divisions of gender, race, and academic cohort serve to inform the research questions. The range of possible outcomes of this research and, therefore, potential answers to the specific research questions stated above include:

1. No self-selection/anticipatory socialization effect and no organizational socialization effect. In other words, there is no difference in orientations of incoming Naval Academy midshipmen and civilian peers and no unique pattern of change (or stability) among different groups of Naval Academy midshipmen. Changes that may occur are the result of maturation, development, or unique circumstances experienced as individuals pass through this period of the life course.
2. College self-selection effect. The orientations of incoming Naval Academy midshipmen and civilian college-bound peers differ from non-college attendees.
3. Military self-selection effect. The orientations of incoming Naval Academy midshipmen and civilian college bound peers with plans for military service differ from civilian college-bound peers and non-college attendees with no plans for military service.
4. Organizational socialization effect. The orientations of Naval Academy midshipmen differ because of organizational socialization (i.e., time in the organization, type of socialization, environmental influences).
5. Interaction effect. The initial orientations and/or subsequent patterns of change (or stability) differ among midshipmen by race, gender, and/or other socio-demographic factors.

The subject, context, and questions in this study occur at the nexus of several prominent and active areas of research in social psychology, organizations, college student development, and military sociology and the theoretical frameworks that follow and the subsequent review of the literature inform these questions. First, in the study of organizational socialization, the military service academy has long been considered a special form of indoctrination to military life, similar to, yet unlike the soldier's "boot camp" experience and entry to the armed forces (Caplow 1964; Dornbusch 1955; Janowitz 1960; Lovell 1964; Lovell 1979; Stevens and Rosa 1994). Second, the dual

purpose of the academy to indoctrinate and train members for a future work role and identity, while at the same time providing a college education, places this context in the realm of identity theory, the literature on college effects, and job values (Astin 1968; Astin 1977; Astin and Panos 1969; Dornbusch 1955; Feldman 1969; Feldman and Newcomb 1969; Franke 2000; Johnson and Elder 2002; Johnson 2001; Knox, Lindsay, and Kolb 1993; Pascarella and Terenzini 1991). Third, a study of the military service academy presents an example of extremes, in that the forms and means of indoctrination and socialization to this organization vary considerably, but tend towards one end of the spectrum (severity and intensity) and the organizational culture (institutional values, attitudes, and normative expectations for behavior) is typically more conservative and well defined when compared to civilian undergraduate colleges (Caplow 1964; Goffman 1964; Priest et al. 1982; Stevens and Rosa 1994; Wells, Demichieil, Williams, and Korb 1976). Given these conceptual linkages in this study, the theoretical framework that guides the analysis is presented in the following chapter.

## Chapter 2 Theoretical Perspective

Socialization, in its most basic form, is the learning and development that permits individual participation in the activity of society (Brim 1968; Clausen 1968a; Clausen 1968b; Mitsch Bush and Simmons 1990; Mortimer and Simmons 1978). Within social psychology, theories of development and socialization have been framed in two distinct ways: psychologically, in terms of the learning and development of language and cognition (Ruble and Goodnow 1998) and; sociologically, through the development of self, in the social structural influences on orientations, and in the context of a continuous flow of self in social roles or experiences (Corsaro and Eder 1995; House 1990). Socialization theory and research is broad, diverse, and located throughout the social and behavioral sciences, but for the purposes of this study, the focus will remain in the sociological tradition.

Mortimer and Simmons (1978) describe three of the more active areas of sociological research on socialization as: *role theory*, an approach that views the process as a largely linear acquisition of orientations and role repertoires resulting from primary group<sup>11</sup> interaction and reference group observation; *generalization theory*, that emphasizes the social structural influences on individuals and the outcomes of adaptation to social life and; *interactionism*, a dynamic process in which individuals interpret situations, create meanings from socialization experiences, and enact responses that result in change in both the individual and the organization. *Life course theory* draws from all three areas and provides an overarching framework to understanding socialization and development by focusing on age-graded norms, generation effects, role transitions, and

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<sup>11</sup> The primary group is defined as a small, influential, and interdependent group involving direct and regular face-to-face contact (Caplow 1964; Forsyth 1999).

historical context (Elder 1994; Elder 1995). While life course theory helps explain the generational, social structural, and normative influences on individuals and cohorts<sup>12</sup> “in time” (both temporal and contextual) (Giele and Elder 1998), the theoretical origins of this study flow from role, generalization, and interactionism perspectives and provide a means to understand the specific processes through which organizational socialization, orientations, and identity relate.

Clausen (1968a) notes that the earliest usage of the term socialization centered on either processes of group formation and functioning or the development of individual social nature through association with others. Contemporary approaches to socialization theory incorporate both aspects of early usage. Moreland and Levine (2001) described it in terms of the changes over time in the relationship between person and group. For instance, at the group level, socialization is the means by which members learn the orientations and role requirements for group functioning, while at the individual level, it is the learning processes and adaptation to interaction that facilitate the development of social life (Gecas 1990; Mitsch Bush and Simmons 1990; Mortimer and Simmons 1978). The group and individual socialization perspectives are combined often, such as in Clausen’s (1968b:5) statement that, socialization provides “a *social character* [italics added] that is appropriate to participation in the kind of institutions and organizations that are to be *staffed* [italics added] in a given society.”

Such explanations of the process highlight the functionalist side of socialization that promotes role membership in society and adherence and identification to group, organization, or societal norms. Through such means of influence and social control,

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<sup>12</sup> A cohort is defined as an “aggregate of individuals (within some population definition) who experienced the same event within the same time interval” (Ryder 1965:845).

functionalists argue that the group or organization's goals and values become the individual's orientations, or at the very least gain from members the necessary legitimacy to permit organizational functioning (Clausen 1968b). Conventional descriptions of the socialization process at the military academies rest upon this conceptualization (Dornbusch 1955; Priest et al. 1982; Stevens and Rosa 1994). Arguments against a functionalist approach, however, claim such "over-socialization" ignores the active role individuals play in creating and maintaining their social environment (Corsaro and Eder 1995; Elder and O'Rand 1995). As a result, this study incorporates identity theory as a means to understand the active role of the individual in this process.

The other theoretical assumptions in this study are that socialization is continuous throughout the life course, but the types and contexts of socialization change and differ substantively by individual s or by groups and organizations (Mitsch Bush and Simmons 1990; Mortimer and Simmons 1978). Another assumption is that while distinct changes in roles and orientations occur in the course of socialization, there is considerable consistency in the self over time (Mitsch Bush and Simmons 1990; Mortimer and Simmons 1978). Lastly, this paper presents the assumption that socialization is not a unidirectional process with the individual as passive recipient (Brim 1968; Mortimer and Simmons 1978). In particular, research shows that older youth and adults often have a choice of orientations, roles, and behaviors and tend to self-select to contexts of socialization that reinforce orientations and identities (Brim 1968; Moreland and Levine 2001; Mortimer and Simmons 1978). The preceding assumptions and the theory and review of the literature that follow reveal pertinent concepts and variables that help to



frame this study of youth orientations, organizational socialization, and identification with institutional orientations and role requirements.

### **Organizational Socialization**

As a specific socialization context, the organization provides much of the formal and informal socialization that occurs in youth and adult lives (Brim 1968; Fogarty and Dirsmith 2001; Gecas 1990; Moreland and Levine 2001; Mortimer and Simmons 1978). Notwithstanding the importance of family, early schooling, and peer groups as socializing processes, the socialization that occurs in organizations, primarily that which prepares and indoctrinates individuals for work and occupations, is one of the most significant influences on individuals in or approaching adulthood (Becker and Strauss 1956; Gecas 1990; Hogan and Astone 1986; Kraimer 1997; Mortimer and Simmons 1978; Pfeffer 1998). Pfeffer (1998) states that more than 90 percent of individuals in the United States will work in an organization during their lifetime and every single person in this country is influenced or directly affected by organizations in some fashion.

The organization as a social system is characterized by a collective identity, a membership set, a specified activity, and procedures for maintaining and perpetuating itself (Caplow 1964:1). In other words, organizations incorporate stable relationships and interactions among known individuals in order to accomplish specified tasks and ensure the continued operation of the organization. For example, the collective identity includes both a common name and a shared image of membership in the organization. Likewise, socialization in organizations focuses on learning and enacting goals and activities of the organization and indoctrinating and training individuals to meet the replacement and growth needs of the organization. In addition, the membership of an organization sets the

possible range of interaction patterns and limits the reference sources to the formal and informal sources available in the organization.

The informal sources of socialization at the Naval Academy include, but are not limited to, peer networks and informal groups associated with sports teams, clubs, and activities as well as in the formal living arrangements, or “companies” at the Naval Academy. The company forms the nucleus of non-academic life while attending the Naval Academy. Each academic cohort of midshipmen is randomly divided into thirty groups, or companies. Each company is comprised of groups from the academic classes (Fourth through First Class midshipmen), who essentially live and train together during the academic year. Overseeing the operation of the company is an active duty junior officer and a senior enlisted advisor, but the First and Second Class midshipmen are responsible for the actual training and leadership of midshipmen in each company. It seems understandable that not only will informal peer group and cohort cultures emerge, but particularly company cultures, as a result of this informal socialization process.

According to Caplow’s (1964:169-172) classic description of how the “organization man” is made, the process of formal socialization incorporates four things in newcomers to the organization.

- A new self-image of that person in a new role. This self-image is a personal reflection of individual and organizational status, interaction patterns, organizational values, and role activities;
- New involvements or patterns of interaction that serve to transmit organizational values and norms. Of equal or greater importance to this process is the abandonment of old relationships resulting from the new involvements;
- New values that are communicated, accepted (or legitimized), and then internalized (identified with); and
- New accomplishments or the attainment of knowledge, skills, and abilities and the completion of certain activities or tasks.

The organization accomplishes this by one or a combination of several modes of socialization (Caplow 1964:172-178). These modes are education, training, apprenticeship, mortification, trial and error, assimilation, co-option, anticipatory socialization, screening, and nepotism. This study is concerned most with the modes that are closely related to organizational socialization in a military service academy. Those modes are anticipatory socialization, screening, self-selection and selection, mortification, training, education, and assimilation. An explanation of those modes and their relationship to this study is presented below.

In *anticipatory socialization* the individual takes on the orientations and behaviors of a group to which he or she does not yet belong (Caplow 1964; Merton and Kitt 1950; Van Maanen 1975). This mode may also involve the rejection of the orientations of one's current group or organization. For example, before their arrival, students who desire to attend the Naval Academy may modify their orientations to those they believe are exemplified by the organization. In the case of individuals with knowledge of or experience with military life (i.e., prior enlisted military service, military family members, family members of graduates, or those who have attended indoctrination seminars), the process of anticipatory socialization may be more accurate and effective than for those individuals whose orientations are influenced by popular culture or myth or for those who have limited prior information (Feldman 1976; Feldman 1981). Anticipatory socialization, while complex, provides the individual with knowledge and expectations that, if accurate and realistic, help with initial entry to the organization (Caplow 1964; Feldman 1981; Merton and Kitt 1950).

*Screening*, or self-selection and selection, occurs when individuals seek out and/or when organizations choose recruits based on characteristics that make certain individuals more likely to succeed or meet personal needs and goals in the organization and assist the organization in achieving its goals (Caplow 1964). In the case of the Naval Academy, a centralized admissions board selects all new midshipmen and the following specific criteria are desired in potential candidates:

- Mental and physical ability to withstand rigorous academic, professional education, as well as physical training programs
- Interest in serving their country as professional officers in the Naval Service
- Capabilities and interests in fields of study reflecting the needs of the Naval Service
- Potential for leadership in the Naval Service
- Capacity and desire to complete the four-year course and remain in the Service beyond the period of obligated service after commissioning.  
(Secretary of the Navy 1996)

The popularity, status, and competitiveness of an academy education results in a large pool of well-qualified applicants and increases the likelihood that individuals with the desired characteristics or qualifications will be selected into the organization. Caplow (1964) notes that because of centralized selection processes, organizations may bypass more qualified candidates in the search for individuals who are more likely to conform to organizational ideals. In addition, the images of organizational culture and the rewards of a service academy education, portrayed through admissions materials and recruiting campaigns, appeal to specific interests and orientations and increase the likelihood that certain individuals will self-select opportunities to participate in the military through admission to a service academy.

There are many complex reasons why certain individuals are selected as members of an organization like the Naval Academy and why some individuals self-select into an

organization or prepare themselves for entry to the organization by adopting the dominant orientations of the organization, while others do not. Unfortunately, the traditional closed-end survey techniques used to collect data in many studies prevent the researcher from unraveling the reasons for self-selection and anticipatory socialization to an organization like the Naval Academy. In general, however, most individuals join and remain in an organization where needs can be met, goals achieved, and valued orientations and identities reinforced (Chatman 1991).

*Mortification* is a mode of socialization commonly associated with the total institution (Goffman 1960) and involves depriving individuals of personal control over their activities and self-image through changes in appearance, harsh treatment and punishment, excessive routinization of activities, and personal confinement or segregation (Caplow 1964; Gecas 1990). The service academy plebe summer experience includes many of these characteristics, including the shaving of heads, wearing common uniforms and symbols of inferiority, participating in demanding and repetitious physical and mental drills, and experiencing restrictions on personal freedoms and contacts with family and friends. The ultimate purpose of these and other activities is to remove individual resistance to the organization's influence and change individual orientations and behavior in the direction of desired norms (Caplow 1964).

*Education* and *training* are formal processes that involve the teaching of organizational values, skills, abilities, and behaviors (Caplow 1964). The primary difference between the two is that training involves teaching for a specific organization, whereas education teaches general orientations and behaviors for a variety of organizations in society (Caplow 1964). The military service academy is a unique

combination of education and training, part college part military indoctrination. In this context, the Naval Academy presents an interesting contrast because its faculty is comprised of slightly more than half civilian tenure-track positions, whereas other military academies have predominately military faculty (Lovell 1976; Lovell 1979; Sweetman 1995). The resulting situation is one in which traditional undergraduate education and military training programs function concurrently to reinforce both universal and organization-specific orientations and behaviors. Lovell (1979) described the academies as being “Neither Athens nor Sparta”, meaning the process of socialization, by design, fosters often competing or contradictory organizational goals. In order for these processes to be successful, the coordination and cooperation of many different sub-organizations with oftentimes-differing goals and priorities must occur (Lovell 1979).

*Assimilation* occurs over a long period of time in which individuals gradually and informally incorporate organizational orientations and behaviors as a result of observation, interaction, and imitation, often when membership is not greatly prized (Caplow 1964). While much of the learning in the academy is formal education and training focused on the assumption of future roles in the military, the organization places a great deal of emphasis on successfully completing the course of instruction and all required training in the midshipman role. Not surprisingly, much of the learning occurs informally in the course of everyday interaction. This is especially the case for the role of midshipman, a temporary training role which has no status in the larger military organization, but upon which future military roles depend. High assimilation of the informal orientations and behaviors of a midshipman may result in high status while at

the Naval Academy, but this temporary status does not translate to influence in future positions and status in the formal roles of the larger military organization.

It is through these modes and processes that midshipmen are socialized to the Naval Academy and the military organization. Through these new patterns of interaction, roles, and identities, civilian youth are expected to become midshipmen and share the orientations and behaviors of the Naval Academy organization and with the military institution in general. The professional competency expectations or official organizational socialization outcomes at the academy are:

...to produce dedicated career oriented individuals who have the intellectual aptitude and leadership ability needed to serve effectively as junior officers in the naval service.

To prepare graduates for this responsibility, the program integrates formal academics with extensive practical training in naval science and programs of ethical and physical development. The goal is to develop junior officers who are professionally competent, committed to service, and unwavering in their determination. The total course of instruction is based primarily on the requirements of the Service and fosters the development of specific competencies in the major Service specialties. (Superintendent United States Naval Academy 1994:iii)

As it is described above, a process of organizational socialization that includes many of the modes and conditions defined in theory exists at the Naval Academy. This process incorporates both formal programs of education and professional development and informal daily social interaction and learning that begin with plebe summer and culminate, ideally, in a professionally competent, career-oriented graduate who has internalized the identity of a professional military officer (Superintendent United States Naval Academy 1994). Whether this occurs and, if so, to what extent forms the basis of this research.

## **Identity Theory**

Identity and identification are central to an understanding of organizational socialization processes, particularly at the Naval Academy (Becker and Carper 1956b; Caplow 1964; Clausen 1968a; Clausen 1968c; Foote 1951; Wells and Stryker 1988). According to Stryker and Burke (2000:284), identity is that part of the self “composed of the meanings that persons attach to the multiple roles they typically play in highly differentiated contemporary societies.” Stryker (1990) also notes that multiple identities exist within the self, limited only by the number of relationships and interactions to which individuals are involved. Identity theory also asserts that socially active selves undertake motivated action and behavior as a result of commitment to self-concepts, or identities, reinforced by processes of self-verification (Burke 1980; Foote 1951; Stryker 1990). Thus, socialization prepares individuals for both new roles and identities and reinforces existing identities through modes of interaction that result in commitment and motivated action in support of the organization.

Identity and the self-concept have been studied also from a psychological and developmental perspective in the literature on youth in college and in the transition to adulthood (Astin 1993; Pascarella and Terenzini 1991; Ruble and Goodnow 1998). Many of these approaches to identity are rooted in Erikson’s stage theory of personality development (Erikson 1963b) and are highlighted by Chickering’s seven psychosocial “vectors of development”, that contribute to the formation of individual identity as well as Marcia’s identity statuses or stages of “diffusion”, “foreclosure”, “moratorium”, and “identity achievement” (Chickering 1969; Evans, Forney, and Guido-DiBrito 1998; Marcia 1966; Pascarella and Terenzini 1991; Thomas and Chickering 1984). Likewise, research on socialization in groups (Levine and Moreland 2001) and occupational



socialization (Chatman 1991; Feldman 1981; Kraimer 1997) has identified stages that highlight the transformational processes and experiences of individuals. By studying the patterns that emerge in the data, relationships to stages may be evident, but the largely cross-sectional nature of the data precludes full analysis of these issues. As a result, this research project will utilize the sociological perspective of role identity theory to understand the socialization to and assumption of occupationally oriented military roles.

According to this theory, individual identities are hierarchically organized by salience and centrality to the individual, with the behavior resulting from the most salient and central role expectations more likely to be enacted in a given situation (Stryker 1990; Stryker and Burke 2000; Stryker and Serpe 1994). For example, Stryker (1990) hypothesizes that structurally isolated situations, such as that encountered during plebe summer indoctrination, will likely call up a single identity, whereas other situations may invoke more than one identity, with the relative salience of identities serving as a better predictor of behavior. Furthermore, commitment to identity has been viewed on the one hand as the ties to other network partners connected with the identity and the costs of not having these relationships, while another conception of identity commitment is the value attached to a set of stable self-meanings that mediate individual behavior (Burke and Reitzes 1991; Stryker and Burke 2000). In both cases, the theoretical relationship predicts that commitment shapes identity salience, which ultimately shapes role behavior (Stryker and Burke 2000).

Stryker (1990:24-25) has formulated a series of hypotheses in his theory of identity. Those conceptualizations most suitable to a study of organizational socialization at the Naval Academy are:

- The greater the commitment to an identity, the more positive the evaluation of that identity and the higher the identity in the salience hierarchy.
- The higher an identity in the salience hierarchy, the more likely role performances will be consistent with the expectations attached to that identity.
- The higher an identity in the salience hierarchy, the more likely a person will actively seek out opportunities to perform in terms of that identity.
- The greater the commitment to an identity, the higher the identity salience and the more likely role performances will reflect institutionalized values and norms based on that identity.

Restated, Stryker suggests that individuals who are more committed to an identity will express positive attitudes about the identity and be more likely to rate the identity as salient, or important to them. Likewise, the more committed to an identity associated with an organization or occupation, the more likely an individual will express orientations congruent to the organization and the more likely the individual will participate in and seek out activities that reinforce that identity. These hypotheses help explain the process of identity formation and the effects of organizational socialization, but only at the individual level. Organizational socialization is the process by which individual role identities and orientations, as well as group and organizational identities are made salient and presents a complex situation that requires additional considerations.

Conceptually, identity consists of an individual component (*identification of* - or knowing oneself and the social environment), as well as a group or organizational component (*identification with* the socializing experience - one's attachment to individual, group, or organizational referents) (Gecas 1990; Gecas and Burke 1995; Hogg, Terry, and White 1995). While the individual level conceptualizations of this theory are commonly associated with identity theory in the sociological tradition, the group/organizational attachment component is related to social identity theory, primarily

a psychological orientation, but becoming more commonplace in sociological social psychology (Hitlin 2003; Hogg et al. 1995; Tajfel 1982).

From the previous conceptualization that organizational socialization contains both individual and group perspectives, identity theory and social identity theory are logically at work in the process of newcomer initiation. The formation of such group ties and identity is an important aspect of socialization and integration into a group or organizational environment. In addition, major life transitions, such as departure from home and entry into military service have impacts on social networks and group relationships that affect identity salience and commitment (Wells and Stryker 1988). Young adults arriving at the Naval Academy present a prime example of such transitions and new relationships. For instance, during plebe summer one of the very first tasks new midshipmen undertake is to learn the names and hometowns of the thirty or so members of one's platoon, or primary group, establishing personal knowledge of the group upon which success or failure will depend during the upcoming six weeks of indoctrination.<sup>13</sup> Actions such as this, along with taking on a platoon nickname or motto and undergoing stressful group activities, reinforce a sense of personal loyalty and emotional ties or commitment to new social relationships and builds solidarity and identification with the group (Lovell 1979). Membership in this new group also brings with it certain status and rewards that contribute to the formation of a new social identity (Knox et al. 1993).

Therefore, as individuals assume the role of midshipman they also become part of the

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<sup>13</sup> In military sociology, the primary group has referred to groups as small as a combat squad and platoon (Moskos 1970) and as large as a company (Shils 1950; Stouffer et al. 1965). In the present research, the plebe summer midshipman platoon of approximately 45-50 midshipmen serves as a primary group, because the same midshipmen live, work, and interact with one another over the course of four years at the Naval Academy. No doubt, there are many other relevant primary groups in a college environment (e.g., sports teams, clubs, and fraternities and sororities), but the plebe summer midshipman platoon is unique to the military service academy context.

Brigade of Midshipmen and a member of the military service and the attitudes and salience of certain roles and group categories would be expected to change with their level of commitment.

At the individual level, role performance as a midshipman is one of the primary standards by which successful organizational socialization is measured at the Naval Academy. In this case, successful role socialization certifies and allocates individuals at the Academy as well as to future work roles in the military organization (Knox et al. 1993; Meyer 1977). For instance, the midshipmen leadership cadres during plebe summer and during each semester of the academic year are selected from those individuals exhibiting the characteristics of leadership and performance most desired by the organization. In addition, during the last semester of senior year, midshipmen select their initial military role assignments based primarily upon military and academic rankings and a process of occupational aptitude tests and interviews that assesses ability and suitability for military roles. Likewise, the organization seeks socialization of midshipmen to group and individual identities that are in keeping with the Academy's goals and values and rewards individuals who embody such orientations. It is likely that the individual role and larger group categorization processes function concurrently, if not in a complementary fashion, highlighting the value of both identity theory and social identity theory<sup>14</sup> in socialization research (Turner and Haslam 2001). This study of socialization at the Naval Academy focuses primarily on the individual roles and values of midshipmen, but also includes group influences and the resulting categorizations associated with the military organization.

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<sup>14</sup> Social identity theory includes the processes and outcomes of individuals seeing oneself and others as members of groups (Gecas and Burke 1995; Turner and Haslam 2001).

In a study of youth values, Hitlin (2003) provides a pertinent theoretical link to the present research by suggesting that a common thread through both identity theory and social identity theory is the concept of personal identity and value orientations. In this approach, personal identity is linked to individual values and serves as an integrating and motivating force between an individual's role and social identities (Hitlin 2003). Furthermore, Hitlin (2003) argues that a values-based approach to personal identity is useful in understanding the formation of specific role identities. According to this argument, a value based personal identity unifies or provides cohesiveness across social identities and is predictive of behavior in specific role identities (Hitlin 2003). The present research applies similar logic to study the personal identity associated with military work and, through the process of organizational socialization at the Naval Academy, understand its relationship to work beliefs and job values, as well as attitudes about the military, role identity salience, and outcomes related to individual role involvement and occupational preferences.

### **Chapter 3 Literature Review**

“There’s only two things you gotta know around here. First, forget everything you’ve learned in the academy because the street [Fleet] is where you learn to be a cop [naval officer]; and second, being first around here doesn’t mean shit. Take it easy, that’s our motto” (adapted from Van Maanen 1975:225).

Formal education and training are considered essential elements in the preparation of individuals for the world of work and in the development of individual commitment to careers (Becker and Strauss 1956; Brim 1968; Clausen 1968a; Johnson and Elder 2002). However, the effectiveness of such formal programs at instilling desired orientations and behaviors is not completely certain (Johnson and Elder 2002; Van Maanen 1975). The central concern of this study is to understand the extent to which the processes of socialization experienced at the Naval Academy actually develop or foster specific job and work orientations, military role behaviors, and occupational preferences for the military in midshipmen. While this study is focused on the development of work or occupational identity and values in individuals, the review of the literature will begin more generally. First, an overview of the socializing effects of college and professional education on student orientations and behavior is provided. Next, this review includes general and theoretical literature on organizational/occupational socialization. Following this, a review of literature on identity theory and youth value orientation formation highlights the specific socialization process to be studied, and finally, research on socialization, orientations, and identity formation in a military academy setting examines similar socialization contexts.

### **The Transition to Adulthood: College Attendance and Socialization to Work**

Adult socialization is prefaced by the transition from adolescence to adulthood (Hogan and Astone 1986). A complete understanding of the effects of organizational socialization to adult roles and occupations is framed in terms of adolescent and young adult experiences and relationships (Mortimer and Simmons 1978). Research has demonstrated the important influence family, peers, and early educational experiences have on youth in transition to adulthood (Cohen, Warner, and Segal 1995; Gecas 1990; Miller, Kohn, and Schooler 1986; Mortimer and Simmons 1978). Likewise, research has also shown that college attendance is one of the most important socialization experiences for young adults in modern American society (Astin 1977; Astin 1993; Astin and Panos 1969; Feldman and Newcomb 1969; Knox et al. 1993; Pascarella and Terenzini 1991). The dramatic increase in the percentage of youth attending college in the past half-century underscores the importance of understanding the potential effects of both college and the military as socializing institutions (Bachman, Freedman-Doan, and O'Malley 2001; Bachman et al. 1987; Johnson and Elder 2002; National Research Council 2003; Segal et al. 2001).

The literature on college attendance has theorized many outcomes for students and society including securing a satisfying and rewarding job, providing the first real independent social life outside the home, development of individual intellect and learning, promoting personal and social growth and development, and adding value to society by supplying skilled and educated participants (Astin 1977; Astin 1993; Knox et al. 1993). Colleges accomplish these outcomes through processes of education, socialization, certification, and allocation (Knox et al. 1993; Meyer 1977). The certification of skills and knowledge and allocation to social roles that result from higher

education are rooted in legitimating and status processes often studied in sociological contexts (Meyer 1977). The primary concern of the present research, however, is with the effects of college as a form of education and organizational socialization to specific work-role related identity, orientations, and behaviors.

Whereas much of the college attendance literature has emphasized the intellectual, moral, and social development of students, it also emphasizes the general changes in individual valuation of the intrinsic or extrinsic rewards associated with future work (Pascarella and Terenzini 1991; Johnson and Elder 2002).<sup>15</sup> On the other hand, the organizational socialization literature has focused on the more immediate nature of socialization to specific organizational goals, values, and roles (Kraimer 1997). The professional school literature, by contrast, has focused on socialization in a college or graduate school environment to highly salient and particular organizational or professional goals, values, and roles (Ondrack 1975). The study of socialization in a professional school environment has focused also on the preparation of individuals for specific professional careers or occupations, such as in the fields of medicine (Becker and Geer 1958; Bloom 1979; Ondrack 1975), business and accounting (Chatman 1991; Mayer-Sommer and Loeb 1981; Mortimer and Lorence 1979b; Schein 1967), engineering, and the humanities (Becker and Carper 1956a; Becker and Carper 1956b). As a result, the literature on professional school socialization serves as a logical bridge between the organizational socialization and college effects literatures in the present context of the Naval Academy.

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<sup>15</sup> Intrinsic aspects of work include the “inherent interest of the work, learning potential, and the opportunity to be creative” while the extrinsic aspects of work are the “instrumental and status attainment-related rewards” of a job (Johnson and Elder 2002:119)



Much like the literature on professional socialization, the Naval Academy presents a unique combination of socialization in a college environment with preparation for a very specific professional or occupational role. The general literature on occupational and professional role socialization, combined with the literature on college socialization effects, helps inform this study of the identities, orientations, role behaviors, and occupational preferences of midshipmen.

#### College Effects and Professional Socialization

The college environment, while quite different from work organizations, encompasses many of the same basic characteristics presented by Caplow (1964), such as a collective collegiate and local identity, defined faculty and student membership, a stated goal to provide individuals with higher education and preparation for work and adult life, and procedures for inducting new cohorts of students and maintaining the base of faculty and staff members. As a specific context for organizational socialization, researchers have utilized a variety of approaches and methodologies to study the effects of college on students.

One of the most widespread social conventions is that college attendance has a substantive impact on one's life (Astin 1977; Feldman and Newcomb 1969; Knox et al. 1993; Meyer 1977; Pascarella and Terenzini 1991). At the same time, one of the more challenging issues in education research has been to determine what, if any, effects actually influence students at the university (Astin 1977; Feldman 1969; Feldman and Newcomb 1969; Knox et al. 1993; Pascarella and Terenzini 1991). The very fact that this question continues to be asked highlights not only the difficulty researchers have had

in accurately assessing this issue, but also the continuing interest and social relevance of it (Johnson and Elder 2002).

While college is believed to have broad and enduring effects on individuals, definitive evidence of outcomes and processes, while widely documented, is not overwhelmingly conclusive (Astin 1993; Feldman and Newcomb 1969; Johnson and Elder 2002; Knox et al. 1993; Pascarella and Terenzini 1991). The basic approaches to understanding college effects have been categorized into three contrasting views. The first perspective includes theories of socialization and development that highlight changes in individual orientations, knowledge, skills, and abilities that occur as a result of college attendance (Johnson and Elder 2002; Knox et al. 1993; Meyer 1977). The second perspective includes allocation theories that highlight the roles that colleges play in establishing and opening social and occupational pathways to individuals (Johnson and Elder 2002; Knox et al. 1993; Meyer 1977). This is accomplished through specialized training and qualification received in college but moreover through the status derived from various college environments and programs (Johnson and Elder 2002). The last perspective is the institutional approach advocated by Meyer (1977) that highlights the role society plays in stipulating and rewarding certain levels of achievement that are associated only with college attendance, thus legitimating college attendance as an entity in and of itself (Johnson and Elder 2002; Meyer 1977).

While it would be interesting to study the institutionalized effects of a Naval Academy education as well as the special allocative role the academy plays in preparing leaders for service in the armed forces, this research is focused only on the socialization and development approach to understanding an Academy education. As Johnson and

Elder (2002) note, the socialization approach helps us understand the processes by which students both learn and come to value the rewards of work to which college provides them access and opportunities. Insofar as the transition to adulthood results in decisions about careers and work it is expected that college attendance structures both the opportunities and valued rewards associated with work (Johnson and Elder 2002; Lindsay and Knox 1984; Mortimer and Lorence 1979b). Likewise, research has found that individual value structures change as a result of changes in role identities associated with both college attendance and with the preparation of college students for future work roles (Johnson and Elder 2002; Lindsay and Knox 1984).

Two of the largest and most comprehensive reviews of the literature on the effects of college, by Kenneth Feldman and Theodore Newcomb (1969) and Ernest Pascarella and Patrick Terenzini (1991), come to essentially similar conclusions. For the most part, the literature highlights changes that occur in students across a variety of cognitive, psychosocial, and behavioral outcomes. While research has shown that college students change from freshman to senior year, the evidence is less certain that these changes occur as a result of college attendance itself, by some distinctive aspects of the collegiate environment or experiences or as a result of normal changes occurring in the course of growth and development as young adults (Astin 1993; Feldman and Newcomb 1969; Pascarella and Terenzini 1991).

One of the clearest findings in this literature is the strong and enduring relationship between education and adult status attainment (Blau and Duncan 1967; Johnson and Elder 2002; Meyer 1977). Thus, it is important to understand the influence of college as a means of preparing for future occupations and adult life. This is

particularly so in light of the nearly three-fourths of high school seniors who now expect to graduate from a four year college (National Research Council 2003). At the same time, the number of high school seniors expecting to attain high status jobs as adults has increased, perhaps in recognition of the importance society places on attending college as a means to achieve valued rewards (Johnson and Elder 2002). An alternate explanation for increased work expectations is the result of idealized orientations expressed by youth with little knowledge and practical experience in the adult world of work (Johnson 2001; Marini, Fan, Finely, and Beutel 1996)

The literature further suggests that changes in college student orientations are primarily a function of student inputs to the college environment, with the effects of college only accentuating initial distinctions (Feldman and Newcomb 1969; Knox et al. 1993; Pascarella and Terenzini 1991). In his study of college environments, Astin (1968) found that the influence of college is a function of the input characteristics of its students and institution-level factors such as the size and organization of the college and its classrooms. The findings in this study and others like it (Holland 1997; Smart, Feldman, and Ethington 2000) have shown that because of the tremendous diversity within and between college environments and the myriad factors that potentially influence student development, it is difficult to draw substantive conclusions as to the effects of college, much less highlight specific developmental processes at work (Astin 1968; Astin 1993; Feldman and Newcomb 1969).

As Astin (1977; 1993) noted, the more vexing issues in studying the effects of college are determining whether one is studying college as a source of impact or whether college is viewed as a place where change and development occurs. In either case, the

central question is “Impact or change in relation to what?” Unfortunately, most research fails to consider the change that takes place or differences that exist in those who do not attend college (Astin 1977; Astin 1993; Johnson and Elder 2002; Knox et al. 1993; Pascarella and Terenzini 1991). At the same time, college experiences and life styles have become so diverse that understanding differences in terms solely of those who attend college and those who do not is not informative (Astin 1977; Astin 1993; Johnson and Elder 2002).

In addition, Meyer (1977) suggests that, while socialization effects of college exist, institutions must provide a motive for individuals to accept new orientations, behaviors, and identities. He also argues that this motivation exists to the extent that colleges legitimate and confer status and perceptions of future rewards on individuals. In this case, Meyer (1977) is essentially arguing that the motivation of students to accept new orientations results from congruence between individual values and the organization’s ability to meet them.

The socialization that occurs in professional schools represents a specific context of the college effects literature that exhibits several similar organizational characteristics to the military service academy socialization process. This process of professional socialization includes an assumption that individuals attain the knowledge, skills, abilities, norms, and values of a fully qualified professional practitioner upon completion of the process (Melcolm 1983; Schein 1967). The literature on professional socialization, while typically at the graduate school level and centered on studies of medicine, law, and business and accounting, serves as a useful bridge to research on socialization in a military service academy.

Unlike the more general college experience, professional schools, like the military service academy, socialize individuals to both future work roles and a value-based professional identity (Bloom 1979; Melcolm 1983; Ondrack 1975; Schein 1967). Role models and individuals directly involved in socialization practices and education define the values inherent in the dominant identity. In the professional school this is accomplished by faculty members or practitioners, depending on the stage in the process (Ondrack 1975; Schein 1967) while at the Academy upperclass students, military and civilian faculty, and military staff members communicate and model the values of the organization.

An important question in the literature on professional socialization, as with research on college students, is not only what values students learn, but when and how orientations are learned in such schools (Schein 1967). While studies of professional socialization abound in the medical education field, two of the most prominent studies are also two of the oldest, one that focused on the “student-physician” (Merton, Reader, and Kendall 1957) and the other, a study of the “boys in white” (Becker, Hughes, and Strauss 1961). Bloom (1979:18-19) highlights the central research issues in these two and other studies of professional socialization as understanding: (1) the status of students in the socialization program, (2) the patterns of orientations that emerge as a result of the professional school experience, and (3) if the professional experience and education accurately and adequately represent required aspects of the future role and of the organization.

In the first case, students as well as school environments were differentiated in terms of student status as either physicians in training in a medical institution or as

subordinate students in a school set apart from the field of medicine (Bloom 1979). It is not surprising then that these two studies came to essentially different conclusions about the development of student cultures and the shaping of dominant values and attitudes about medical training and the practice of medicine. Becker and colleagues (1961) argued that the organizational structure prevented the students at Kansas from taking on the professional role of doctor in medical school and, therefore, they were resigned to the fact that they had only to endure the stress and challenges of the present in order to one day begin the practice to which they aspired (Bloom 1979). Merton and colleagues (1957) found that, while a subculture formed in the Columbia study, it was largely a means of self-enforcement of prevailing school values and behavioral norms and argued that it was because of the professional status students had in the school environment (Bloom 1979). Both studies confirmed that environment, the individual, and the organizational structure interact in the socialization process to produce differing individual and organizational outcomes.

Similar to the more general research on college effects, professional school socialization literature has shown that individual orientations change over the course of education and training from idealism to greater realism and even cynicism (Astin 1977; Astin 1993; Bloom 1979; Pascarella and Terenzini 1991). Whether the causes of this change are a result of the socialization context, the attainment of greater knowledge about the professional field and day-to-day requirements, or from normal development and maturation present in all developing adults remain unconfirmed (Bloom 1979). Lastly, the question of whether or not the professional school values accurately reflect those of the larger professional organization is not as applicable to the Academy context where

the military organization values are explicitly publicized and reinforced to its students. What might be at work, however, is a situation in which individuals at the Academy view contradictions in the value orientations and role behaviors of reference group members and role models and conclude that the values of the larger organization are not relevant or applicable in some contexts.

While the college effects literature provides general background for the changes that may be taking place during midshipmen tenure at the Academy, the professional school literature provides a context for explaining the unique value socialization that occurs during four years in Annapolis. What is clear from the literature is that the college environment is important, but its importance cannot be completely understood unless the effects are contrasted with other considerations such as, input characteristics and the effects of not attending college. Some of these factors have been addressed in the literature associated with organizational and occupational socialization.

#### Organizational and Occupational Socialization to Work

“Old”, or classic organization theory presents the primary characteristics of an organization as: goal orientation and the process of perpetuating or sustaining the organization (Caplow 1964; Katz and Kahn 1978). A significant component of the sustaining/perpetuating process in organizations centers on the indoctrination and training of new members, otherwise termed socialization. Through this process, organizations prepare members to assume new positions and identities and undertake tasks associated with the organization’s goals (Brim 1968; Caplow 1964; Feldman 1976; Feldman 1981). In addition to these components, Van Maanen (1975) emphasizes the importance of organizational socialization on relinquishing previous roles and orientations. Finally,



Schein (1990) states that socialization reproduces the organization's culture through the indoctrination of new members to important values, attitudes, and behaviors.

Throughout the general research on organizational socialization, a primary assumption is that newcomers are unable to "learn the ropes" associated with entry to the new organization well enough on their own (Schein 1990). Another assumption is that most recruits have little, if any, information by which to make sense of this new situation and, therefore, the period of initial socialization is assumed to be an important and very influential time of sense making and learning (Van Maanen 1975). Lastly, it is assumed that there are multiple sources of influence and outcomes across this complex and dynamic process (Feldman 1981).

As a result of the different perspectives on this complex process, research on organizational socialization has proliferated over the years in several areas. The most prominent of these areas include: stage research, or the steps through which members progress in socialization; interactionist approaches that focus on how members learn and make sense of the process; socialization tactics research, or how differing methods of socialization affect outcomes; and content research that highlights what new members learn and how well they learn it (Klein and Weaver 2000; Louis 1980). Socialization tactics and the stage-based approach to organizational socialization bear the most on this investigation of the influence of the Naval Academy on midshipmen orientations.

Socialization tactics, or the practices and procedures that bring newcomers into the organization, are widely studied and examine the effects of different organizational settings on individuals (Louis 1980). Van Maanen (1975), in his study of urban police department recruit socialization, originally proposed five opposing pairs of tactics, or

characteristics of the socialization setting (subsequently expanded to six tactics (Schein 1990)), and presented expected outcomes for typical variable combinations. The pairs of socialization tactics are: group vs. individual processing of experiences; formalized training programs vs. informal interactions; sequential steps or progression vs. random, ambiguous acts; fixed and normalized timetables for completion vs. variable or unknown completion processes; serial or experienced mentorship and training vs. random or no-role models; and investiture, or self-enhancing methods vs. divestiture or denying and stripping former identities from individuals (Ashforth and Saks 1996; Jones 1986; Schein 1990; Van Maanen 1975).

The first two socialization tactics concern the context of the situation (Jones 1986; Van Maanen 1975). In group socialization, newcomers undertake collective learning experiences centered on standardized responses and a general acceptance of the organizational status quo (Jones 1986). Formal socialization tactics segregate recruits in order to focus the situation on the organization, the primary source of information and situational definitions, thus increasing the likelihood of shared orientations (Jones 1986). At the Naval Academy, group and formal tactics are utilized all four years but especially during the first year in residence. Incoming freshmen, or plebes, are segregated from upperclass midshipmen and exposed to identical group experiences and information during six weeks of plebe summer before the start of the first academic semester. While official and formal, the summer training of upperclass midshipmen is conducted in differing groups and in various military units and installations around the globe.

The next set of tactics center on the content of the socialization process and include sequential tactics, in which the road to formal membership is followed

exclusively, as well as fixed tactics that highlight the specific knowledge required to complete each step along the way (Jones 1986). At the Naval Academy, especially during the first year, midshipmen must follow explicit behavioral rules and requirements as well as complete specific technical and professional training courses in order to progress to graduation and ultimately receive a commission as an officer (Superintendent United States Naval Academy 1994). Once midshipmen complete their first year at the Naval Academy, they are afforded greater choice in terms of academic coursework and in the professional activities in which they participate.

The final category of tactics deals with the social aspects of the process and includes serial tactics, in which experienced members act as newcomer role models and investiture tactics, where recruits are provided social support and positive affirmation of their competency in order to increase commitment to the status quo (Jones 1986; Van Maanen 1975). It is in this category of tactics where the Naval Academy socialization process differs slightly from the traditional model. During plebe summer at the Naval Academy, upperclass midshipmen conduct all formal socialization tactics and serve as role models that depict ideal organizational socialization for newcomers. During the academic year, however, socialization becomes randomized and newcomers are exposed to a variety of midshipman, officer, and civilian faculty role models. Likewise, much of the subsequent summer training and indoctrination midshipmen undergo is conducted by or with a variety of “fleet” or regular Navy and Marine Corps personnel. During plebe summer, the process of socialization begins as divestiture, in which former civilian roles and individual orientations are stripped away and replaced by military orientations and behaviors. At the same time, midshipmen are provided frequent reinforcement that they

represent the very best and brightest the nation has to offer and that they possess the characteristics of future leaders in military and civilian life (Lovell 1979; Office of the Superintendent 2003). Therefore, both divestiture and investiture is occurring.

Throughout the course of four years at the Naval Academy, midshipmen are provided many opportunities to invest individual, rather than collective, identities through academic, athletic, and professional achievement and through participation in non-midshipman group affiliations. Therefore, it is possible that at the Naval Academy, as with other organizations that bring in large cohorts of individuals, sub-groups of individuals may form that “invest” or reinforce orientations that are incongruent or deviant to the prevailing organizational goals and values (Chatman 1989).

The socialization tactics originally proposed by Van Maanen (1975) have been empirically tested and refined in a number of studies. In a study of the socialization of MBA program graduates to work, Jones (1986) found that different ends of the continua of socialization tactics, rather than the combinations of tactics proposed by Van Maanen (1975), determined the general type of socialization and influenced subsequent behavioral outcomes. Socialization tactics were found to form two general dimensions reflecting either institutionalized or individualized tactics<sup>16</sup> and that by mediating the information and knowledge newcomers held, organizations created either custodial or innovative role orientations in members, respectively (Jones 1986).<sup>17</sup> This research also demonstrated that custodial orientations, associated with institutionalized tactics, reduced

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<sup>16</sup> Institutionalized tactics are considered to be collective, formal, sequential, fixed, serial, and investiture while individualized tactics are individual, informal, random, variable, disjunctive, and divestiture (Jones 1986).

<sup>17</sup> Custodial orientations are those that are supportive of the prevailing or collective organizational goals and values, whereas, innovative role orientations are those that reflect individual goals and plans (Jones 1986).

role ambiguity, role conflict, and intentions to quit the organization while increasing overall job satisfaction and organizational commitment (Jones 1986). The cross-sectional design of this study limited its argument of causality, but follow-on research addressed this shortcoming.

In a study that replicated Jones' (1986) research and extended it to a longitudinal design, Allen and Meyer (1990) found that statistically significant differences in role orientations (institutionalized or individualized) of MBA graduates were predicted at 6 and 12-month intervals not by Jones's hypothesized general institutionalized tactics but by serial tactics alone. In addition, while fixed and investiture tactics predicted higher organizational commitment at 6 months, only investiture predicted commitment at the 12-month point (Allen and Meyer 1990). An explanation for the lack of hypothesized effects for collective and formal tactics could be that the contexts of work and the population in this study (MBA graduates from different schools, entering different fields of work) do not fully replicate the theoretical conditions expected in either a fully institutionalized or individualized socialization program. In a similar fashion, numerous studies have acknowledged, yet none has provided direct empirical support for, the belief that institutionalized military socialization tactics, like the collective, formal, sequential, fixed, and serial processes of boot camp and plebe summer, produce prototypical custodial orientations in military newcomers (Allen and Meyer 1990; Jones 1986; Schein 1990; Van Maanen 1975).

Aspects of the Naval Academy socialization process that suggest the operation of both institutionalized and individualized tactics have already been described. If the process of socialization at the Naval Academy is more institutionalized during plebe

summer than at other times, the outcomes of newcomers would likely reflect a pattern of custodial support for organizational values and goals, while the orientations of other midshipmen would be more innovative and individualistic.

In another longitudinal study of MBA graduates, Ashforth and Saks (1996:153) extended the research on socialization tactics beyond general role orientations to include dimensions of person change defined as “alterations in an individual’s values, attitudes, personality, and career plans”. During the period of adjustment to work, institutionalized tactics (except investiture) were predicted to result in person change to the extent that incoming individual orientations diverged from organizational goals and values (Ashforth and Saks 1996). The results of this study confirmed predictions that investiture tactics (redefined by the authors as reinforcement of current attributes and identity) were negatively related to person change at both time intervals, while investiture and individualized socialization tactics were related to enhanced newcomer performance (Ashforth and Saks 1996). Contrary to the predicted effects, the authors in this study found only one institutionalized tactic associated with person change, collective tactics (at the 4 month interval only) (Ashforth and Saks 1996). This study provides further evidence that organizational socialization tactics are less polar opposites than locations on multi-dimensional continua.

The research on socialization tactics has also advanced the notion that institutionalized tactics reduce uncertainty in newcomers by providing information and confirming behavioral expectations that results in greater conformity, organizational identification, and commitment (Ashforth and Saks 1996; Jones 1986). The research also has shown that institutionalized tactics, by enforcing norms and imposing standards,

result in reduced levels of achievement and role innovation potentially hindering success in many organizational settings (Ashforth and Saks 1996). Most studies of socialization tactics, however, have focused on small, distinct populations (e.g., police recruits and MBA school graduates), and have employed weak theoretical conceptualizations. This lack of contextual breadth is one of the more serious limitations of this line of research (Ashforth and Saks 1996). Research on socialization tactics among other populations and in different contexts, like midshipmen at the Naval Academy, may help substantiate this approach.

An understudied corollary to the Ashforth and Saks (1996) hypothesis in socialization tactics research is that the closer individual orientations match organizational goals and values at entry, the smaller the hypothesized amount of change necessitated by the socialization tactics. This greater congruence, or “fit” between individual and organization, results in less individual orientation change and allows frequent opportunities for investiture, or reinforcement of similar orientations to occur. It is expected that higher levels of “fit” will result in greater custodial orientations toward the organization and, combined with frequent opportunities for investiture, provide more positive person outcomes (satisfaction, commitment, extra-role behaviors, and higher individual performance). Despite shortcomings in previous research, investiture tactics, or the social support provided to and reinforcement of existing individual orientations, has demonstrated both theoretical and empirically substantive influence in person and role change.

This study considers the general influence of socialization tactics by comparing the socialization experiences of newcomers during plebe summer to those experienced by

upperclass midshipmen. It looks at two different points in the midshipman socialization process, plebe summer and other summer training periods, to determine whether the form of training and indoctrination results in different changes in person outcomes (value orientations and occupational preferences), thus providing some further evidence of a socialization tactics effect. Furthermore, this study considers the effects of these socialization tactics on women and different racial groups, a little studied aspect in previous research.

In contrast to the content-based socialization tactics research, the stage-based models of organizational socialization typically investigate the process through which individuals become indoctrinated as members of an organization. Stage models of socialization incorporate an initial period in which individuals deal with the shock of entering an organization and discovering new realities of role and environment (Feldman 1981; Louis 1980; Van Maanen 1975). The next stage is the change and acquisition phase in which individuals make accommodations or acquire new orientations to organizational and role demands, such as resolving intra- and extra-work conflicts (Feldman 1976), assessing the congruence of personal needs and the ability of the organization to meet them (Schein 1984; Schein 1990), clarifying role behaviors (Wanous and Reichers 1984), and finding reference groups that locate oneself within the organization and reinforce and motivate individual action (Kemper 1968; Wanous and Reichers 1984).

The primary difference among stage models of organizational socialization is the inclusion of socialization prior to entry into the organization. Daniel Feldman's Contingency Theory of Organizational Socialization (1976) and its elaboration shown in

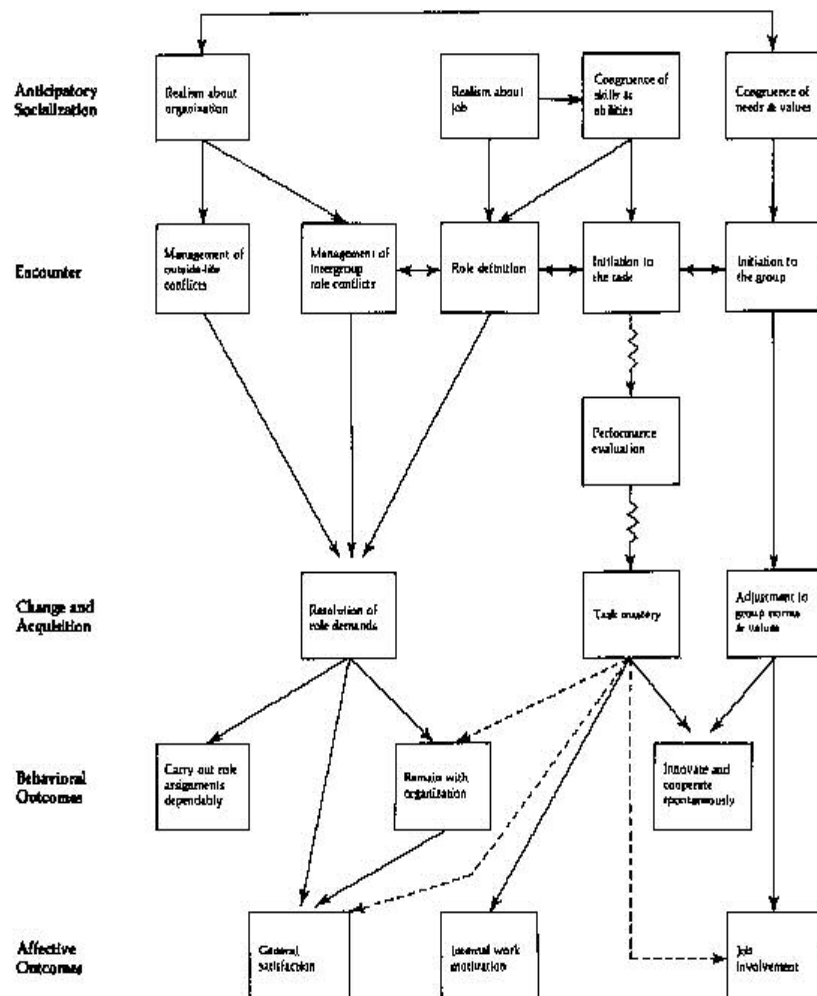


Figure 3.1, captures the pre-entry process, termed anticipatory socialization, and models it along with other contingent factors. In this model, process variables indicate the completion of tasks and challenges or the resolution of problems related to organizational entry, while the outcome variables provide a measure of effective socialization to the organization (Feldman 1976). This model is helpful in understanding how individuals bring existing orientations to organizations and how values are related to behavioral and affective outcomes, both important aspects of the present study.

In the first stage, individuals form expectations about the organization and future roles in it based on the information they have obtained about the organization and the personal orientations they possess (Feldman 1976). The congruence between prior expectations and the reality of organization life influence the remaining stages of the process (Feldman 1976) in typical contingency model fashion. The second stage in Feldman's (1981) model is the encounter, in which individuals clarify roles, experience the realities of the organization, and deal with conflicts resulting from initiation to the group and task (Louis 1980).

The third stage, change and acquisition, is characterized by long-term changes such as task mastery and adjustment to the norms and values of the organization and is believed to flow from the resolution of previous role demands (Feldman 1976; Feldman 1981). The last stage of the model describes behavioral and affective outcomes of the organizational socialization process that include plans to remain with the organization, overall satisfaction with the work environment, and internal motivation to work itself (Feldman 1976; Feldman 1981).

**Figure 3.1 The Multiple Socialization of Organization Members (Feldman 1981)**



Moreland and Levine (2001) have developed a stage model of socialization that does not end with outcome measures as many models do, but rather approaches socialization from a cyclic passage of the individual through the group and interaction with the group over time. Similar to other stage approaches, this model begins prior to individual entry to the organization and includes three basic process, evaluation, commitment, and role transition (Moreland and Levine 2001). The basic process of the model involves individuals investigating organizations and organizations recruiting

individuals, or evaluating one another to the point at which a level of commitment between individual and group results in entry to the organization and transition to a new role. The next stage involves the socialization and interaction of individual to the group or organization and the evaluation of individual and group needs and goals being met to the point of commitment and role transition as a full member of the group or organization.

At this point, Moreland and Levine's (2001) model moves beyond the other stage approaches by including the process of decreasing evaluations to demonstrate individual or organizational needs no longer being met and a reduction in commitment to the point of divergence and role transition to a marginal group member. While the model allows for role negotiation and resocialization to full member again, Moreland and Levine (2001) argue it is unlikely that commitment will increase sufficiently to permit reintegration. The final stage involves evaluation by member and group, and a continued decrease in commitment until the exit point from the organization and role transition to ex-member. From this point onward, evaluation and commitment continue in a period of remembrance by both individual and organization, but there is likely no further involvement and the levels of commitment stabilize (Moreland and Levine 2001). The cycle of investigation and entry, socialization and acceptance, divergence and exit is similar to other stage models of socialization and mirrors the socialization process of midshipmen at the Naval Academy, but differs in the sense that upon graduation, members depart the Academy but do not leave the military organization.

Related to Daniel Feldman's (1981) encounter stage and Moreland and Levine's (2001) investigation stage as well as the socialization tactics literature, is research on the

severity of initiations to organizations, such as that occurring in college fraternities and military organizations. In this area of research, it is hypothesized that the harshness, or severity, of initiation to a group results in individuals expressing greater attraction for that group (Aronson and Mills 1959). This research is derived from the cognitive dissonance literature (Aronson and Mills 1959; Festinger, Schachter, and Back 1963) in which individuals seek to reduce the dissonance associated with a stressful or a counter-attitudinal behavior that they voluntarily experience or endure. The stress is accommodated by one of the following outcomes: either leaving or discrediting the situation or by changing or strengthening the attitudes supporting it (Kraimer 1997).

Research on the effects of the severity of initiation has produced mixed results and in some instances has shown that the severity of initiation results in the group becoming more attractive (Aronson and Mills 1959). In more recent research in more diverse group settings and contexts, research has demonstrated that, regardless of severity, the mere symbolical initiation to a group results in attraction to it (Guimond 1995; Lodewijkx and Syriot 2001). Conversely, in a study of the initiation activities of hospital employees, symbolic initiation during the encounter stage resulted in neither higher levels of personal competence, nor greater feelings of group acceptance, but that congruence between individual and organizational goals and values, otherwise termed “fit”, resulted in greater overall group affiliation and organizational commitment (Feldman 1977).

A central consideration emerging in both the research on tactics and stage models of socialization is the effectiveness or “completeness” of socialization efforts. This outcome is often studied in terms of the congruence between individual and

organizational orientations and expectations (Argyris 1957; Feldman 1981; Wanous and Reichers 1984). Congruence, or similarity in individual and organizational orientations, whether through prior similarity or “successful” socialization, is theorized to result in a better “fit” between the person and organization (Chatman 1989; Schneider 1987). Better “fit” has been associated with greater job involvement and work role satisfaction, extra-role and organizational citizenship behaviors (OCB)<sup>18</sup>, and higher work role identity and organizational commitment (Allen and Meyer 1990; Chatman 1989; Chatman 1991; Feldman 1976; Feldman 1981; Kraimer 1997; Schneider 1987).

Despite the acknowledgement that individual-organization congruence is central to socialization research, the prior orientations of individuals is an understudied aspect of both the stage and tactics literatures (Kraimer 1997). This is surprising considering the fact that differences in individual “fit” cannot be explained exclusively by incomplete or ineffective socialization efforts by the organization; other factors must explain the outcome. Likewise, theoretical and empirical support abounds for models depicting the interaction of person and organization (Holland 1997; Reichers 1987; Schneider 1987), thus necessitating the logical inclusion of prior orientations in any research on socialization (Kraimer 1997).

Another understudied consideration in the stage-based research is the departure of individuals from roles and orientations held prior to organizational entry (Louis 1980). This factor is important because the prior orientations and identities individuals leave behind (or fail to leave behind) are influential in the reality experienced by recruits entering the new organization. This is especially relevant to research on socialization in a

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<sup>18</sup> Organizational Citizenship Behaviors (OCBs) are extra-role behaviors that committed individuals engage in to benefit the organization and the individual (Kraimer 1997)

“total institution”, during resocialization efforts (e.g., prisons and mental hospitals), or in organizations with very strong or centralized values and organizational culture, such as in the military, medicine, religion, and law (Louis 1980). In these situations, successful socialization and person-organization congruence demand total, or near complete, acceptance of organizational goals and values (Goffman 1964) and prior orientations and the strength of ties to previous roles determine the extent of change required to achieve such congruence.

The personnel selection literature is directly related to congruence research in that it is premised on organizations choosing individuals who meet pre-existing orientations and abilities, while at the same time individuals select into those organizations they believe match their orientations and allow them to realize preferences, needs, and expectations (Chatman 1989; Holland 1997). Schneider (1987) argued that this process of organizational behavior functions as a cycle of attraction-selection-attrition (ASA) of individuals in organizations. In this ASA model, certain individuals are attracted and selected to organizations based on desired characteristics and opportunities while other individuals depart because of a lack thereof. The result is a restricted range of both individuals and behaviors that creates an ecological image of socialization to organizational orientations (Schneider 1987).

As mentioned previously, Chatman (1989) argued that the closer newcomer orientations are to the organization’s values, the less socialization is required to indoctrinate them to the new environment. Furthermore, in organizational psychology, Holland (1997), has proposed that people choose their vocational environments and that organizational and individual behavior is determined by the interaction of individual

orientations and environment.<sup>19</sup> For instance, the research on social structure and personality has shown that individual orientations have a distinct influence on the substantive nature of one's work and that work experiences, in turn, influence individual orientations (Kohn and Schooler 1978; Kohn and Schooler 1982). In another example, Sigelman (1973) studied the impacts of two very different sets of organizational values on political attitudes of newspaper journalists. In both cases, Sigelman (1973) found that the newspapers neither recruited nor actively socialized new reporters in dominant organizational values (liberal or conservative), reinforcing the common myth of journalistic freedom. Instead, each newspaper maintained its political stance because like-minded individuals were attracted to the preexisting environment and sought work there over the other paper, sustaining either the liberal or conservative image by producing work that reinforced the commonly held views of senior reporters and editorial staff (Sigelman 1973). From this review, it is evident that an informed approach to socialization research must consider the prior orientations of individuals influencing the self-selection and selection to the organization.

While empirical support for the ASA model and self-selection literature exists, a criticism has been the lack of attention the model gives to increasing diversity in workplaces and organizations (Kraimer 1997). Unfortunately, the ASA model sets forth the unrealistic presumption that the highly restricted range of membership leaves little need for organizational socialization of newcomers. While organizations recruit and select individuals they believe fit the organization and individuals hope to match personal

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<sup>19</sup> This approach, as well as the person-organization fit and ASA models, flow from the field theory tradition of Kurt Lewin (1951) that explains behavior as a function of person and environment ( $B=fPE$ ).

and organizational values, the process is always less than perfect (Chatman 1989; Chatman 1991; Kraimer 1997).

The ASA and person-environment “fit” models are particularly relevant in contexts like the Naval Academy where conformity to organizational values and behaviors is central to organizational success. While the populations of military service academies are becoming more diverse in terms of race and gender (United States General Accounting Office 1995a; United States General Accounting Office 1995b), the core values and institutional goals and objectives remain rooted in the traditional masculine military values of honor, obedience, loyalty, leadership, and achievement (Janowitz 1960; Lovell 1979). Such visible emphasis on the organizational values and a commitment to conventional forms of newcomer recruitment and organizational socialization creates an environment where the ASA model might explain a substantial portion of the person-organization congruence and organizational success. At the same time, the dominant values of the organization help explain why certain groups (i.e., women and racial and ethnic minorities at the Naval Academy) do not share the orientations of the majority group.

There is a more conceptually specified model of person-organization “fit” that is theoretically linked to stage-based socialization research and explains the interaction of person and environment in terms of the congruence, or “fit” between individual and organizational orientations, values, and goals (Chatman 1989). In this model, selection and socialization processes are hypothesized to influence individual/organizational congruence, resulting in different levels of person-organization “fit” and varying personal and organizational outcomes (Chatman 1989). Specifically, Chatman (1989) predicts that



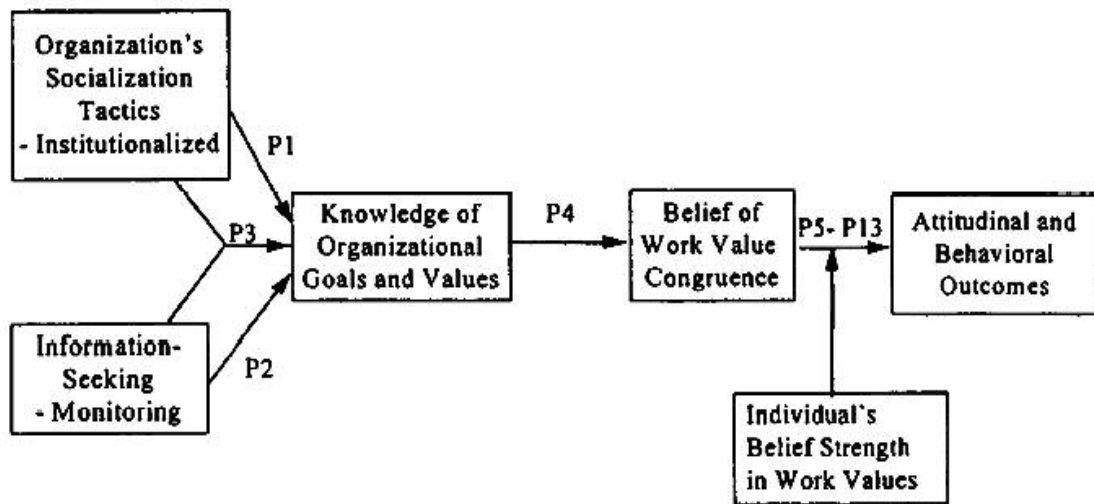
individual values will be changed towards those of strong organizations, where values and goals are dominant and well known, to the extent that individuals are open to influence in those values. The present study suggests that openness to influence is related to belief strength of individual values, or the centrality and salience of a certain orientation. Chatman (1989) hypothesized that higher levels of person-organization “fit” result in positive person outcomes (e.g., commitment and extra-role, pro-social, or organizational citizenship behaviors (OCB)). This research is related to the ASA model and includes concepts of anticipatory socialization, in which newcomers become involved with the organization and receive information prior to entry. The person-organization model predicts that when individuals engage in information activities before entering the organization, individual values will be more similar to those of the organization (Chatman 1989). Lastly, Chatman (1989) predicts that organizations with strong values that provide greater socialization opportunities early on will bring about greater change in person characteristics and foster higher levels of person-organization “fit”. As a caveat to this prediction, the model proposes that selection, rather than socialization, will explain greater variance in person-organization “fit” earlier in the process of newcomer indoctrination.

In a test of the person-organization model, Chatman (1991) added to the original propositions a prediction that higher person-organization “fit” would be related to job satisfaction and tenure in the organization. Chatman (1991) conducted a longitudinal study of the transition of accountants from college to large accounting firms and found that greater involvement with the organization prior to and during entry resulted in higher person-organization “fit” and that the greater the observed “fit” at entry, the higher the

satisfaction and intentions to remain with the organization. While this research confirmed the overall model of person-organization “fit” and the concept of congruence in orientations, Chatman (1991) argued that further research that focused on specific outcomes or orientations and studied different organizational contexts would provide much needed validation of the model.

Kraimer (1997) presented this needed refinement and expansion of the person-organization “fit” construct in her interactionist model of socialization to organizational goals and values (figure 3.2). In this model, the efforts of organization and individual to ultimately find a good “fit” are expressed in terms of the relationship between knowledge of organizational goals and values (resulting from actions prior to entry and socialization subsequent to entry) and individual assessment of work value congruence (Kraimer 1997). In other words, the greater knowledge one has about organizational goals and values, the more likely an individual will be able to assess accurately organizational value congruence and person-organization “fit”. This model, in a manner similar to the stage models of socialization, predicts that level of work value congruence, or “fit”, is moderated by individual work values belief strength and determines affective and behavioral outcomes of newcomers (Kraimer 1997). By more accurately assessing the level of value congruence, individuals are able realistically to engage their personal work belief strength or work identity in the organization and affect outcomes such as satisfaction, career intentions, and extra-role and pro-social behaviors.

**Figure 3.2 Organizational Goals and Values: A Socialization Model  
(Kraimer 1997)**



Kraimer's (1997) model is unique in that it includes individual belief strength as a moderator variable. How individuals make sense of the socialization experience is combined with measures of personal motivation and identity to understand more fully the effects and outcomes of newcomer entry and socialization to an organization. Applied to the present study, the highly institutionalized tactics of the Naval Academy socialization process, along with self-selecting midshipmen combine to provide differing levels of knowledge of organizational goals and values. One would also expect knowledge differentials to occur as a result of tenure in the organization, with those serving longer having greater knowledge. In addition, differentials may occur when individuals have greater opportunities to learn organizational values from prior military service, attendance at Naval Academy indoctrination programs (e.g., the Naval Academy Preparatory School and pre-entrance seminars), or from family members who have either attended the Academy or who have served in the military service.

Differential knowledge of organizational values and goals may also result from the type of socialization tactics utilized. During the initial training and indoctrination of

plebe summer, the role models of organizational behavior are limited to those upperclass midshipmen chosen specifically because of their special aptitude or interest in the process. The severity and institutionalized nature of plebe summer indoctrination limit the available knowledge to only that information supporting organizational goals and values. After plebe summer, newcomers are exposed to a variety of role models at the academy and other information that presents multiple views of the most important organizational knowledge, goals, and values. Likewise, during subsequent summer training periods in Navy and Marine Corps units, midshipmen are exposed to diverse role models and sources of information related to broader organizational values of the naval service. Finally, as midshipmen reach the culmination of their four years at the Academy, the role models they seek out become less diverse again as they narrow their focus in an attempt to gather knowledge about the specific warfare or support communities they will enter upon graduation.

As a result, one would expect to observe less variation in the orientations of newcomers who have had access to prior information and experience concerning the values of the academy. Likewise, less variation would be expected in the orientations of midshipmen undergoing the formal indoctrination and socialization of plebe summer, while the upperclass training and indoctrination experience, being less formal and exposing individuals to more diverse role models and values, will likely result in greater variation in their orientations, plans, and preferences. On the other hand, as midshipmen spend greater time in the organization, the extent and clarity of their knowledge of organizational values increases, allowing them to assess value congruence more accurately. As a result, those midshipmen with higher value congruence would be

expected to express positive views of the organization and hold more salient military role identities.

The only remaining consideration in this model is the strength of individual work beliefs that motivate individual action and identity commitment. The relationship between belief strength and work value congruence is a central concern in the framework proposed by Kraimer (1997) and provides an informative means to assess the effects of socialization on the personal work identity of Naval Academy midshipmen. Kraimer (1997) presents a dichotomized relationship between work value congruence and individual work value belief strength.

The matrix in Figure 3.3 depicts various individual outcomes resulting from the relationship between level of work value congruence and individual work value belief strength. The level of work value congruence defines how individuals respond to variations in value discrepancies, where individual belief strength acts as a motivator when it is strong and has little impact when it is weak (Kraimer 1997). For instance, high work value congruence is expected to result in commitment to the organization, whereas low work value congruence will result, at best in value shifts toward greater congruence, but may also bring about counter-organizational behaviors.

Individual work belief strength, in turn, motivates behavior based on the level of work value congruence, such that strong work beliefs result in high commitment and identification when values are congruent and low commitment and identification when congruence is low. Likewise, weak work beliefs result in little motivation beyond changes that increase the congruence in values. Therefore, it is expected that there will

be less change over time in the values of individuals with strong work beliefs and greater instability in the values of individuals with weak work beliefs (Kraimer 1997).

**Figure 3.3 Individual Belief Strength by Work Value Congruence: Effect on Outcomes  
(Kraimer 1997)**

<b>Work Value Congruence</b>	High	Weak Effect on Attitudes; Compliance-Based Commitment	High Organizational Identification; High OCB-Organization
	Low	Individual's values change to increase work value congruence	Negative External Corporate Image; Low Organizational Identification; Involvement in Non-work Activities; High Turnover, Compliant Behaviors
		Weak	Strong
<b>Individual's Belief Strength in his/her Work Values</b>			

In a similar fashion, the present study evaluates the level of individual role identity salience (hypothesized to be a function of the congruence of individual and organization values) and the strength of one's personal work beliefs or personal work identity. In this case the strength of commitment to a personal work identity and associated role values motivates self and role behavior (Burke and Reitzes 1991; Foote 1951; Hitlin 2003). For instance, the greater the value congruence, the more likely an identity associated with the organizational context will be considered salient and the higher it will be in the identity hierarchy. Higher identity salience, like value congruence in Kraimer's (1997) model, is not sufficient to promote action, but needs commitment, or belief strength, in order to function completely.

The highest level of organizational identification and the most positive organizational outcomes occur when work value congruence is high and work beliefs are strong (Kraimer 1997). In this sense, it is expected that there will be less change over time in the identity salience of individuals with strong work beliefs than in those individuals with weak work beliefs. Likewise, the most positive organizational outcomes are expected for those individuals with strong work beliefs and high role identity salience since those individuals both see the organization's values as congruent with their own and are motivated to pursue opportunities to validate and reinforce this identity in this organization.

Kraimer's (1997) model of socialization and its hypothesized outcomes as well as the other stage and tactics socialization research reinforce the concept that individual orientations play a central and critical role in the entry of newcomers to organizations. The following section provides a review of research that examines specific changes in youth identity and value orientations related to occupational roles. By introducing the complex and diverse effects colleges have on students and organizations have on their members, this research provides the necessary background to the study of youth identity and occupational value orientations.

### **The Development of Identity and Values in Youth**

The literatures in this section are combined to enhance an understanding of the relationship between the variables of interest in this study and the context and conditions under which they will occur. Specifically, the relationship between personal work identity, job values, and occupational preferences in midshipmen will be studied in the context of organizational socialization at the Naval Academy. In order to accommodate

particular variables in this study it is necessary to include the more seminal literature on identity commitment, salience, and role behavior before proceeding with a study of personal work identity. Likewise, influential literature on youth job values and identity and value formation in a military academy is included as a means to understand the particular context and influence of the socializing organization.

### Identity and Commitment

Burke and Reitzes (1981:84) conducted a study of identity and role behaviors and hypothesized that individuals are motivated to act in ways that reinforce existing identities and suggested that a mutual link between identities and behaviors exists through common underlying frames of reference. They further hypothesized that this frame of reference is linked to the extent that the *meaning* of the identity and the *meaning* of the performance are the same, which is similar to the idea of value congruence or “fit” in organizational socialization. Their research design ascertained the meanings of both the identities and the associated behaviors from respondents. They hypothesized that variations in role performances would be predicted from variations in role-identities, and the relative strength of the identity-behavior link would be related to the congruence between identity and performance meanings (Burke and Reitzes 1981).

In this study, Burke and Reitzes (1981) assessed college student role-identity relative to counter-identities (high school student, graduate student, college graduate, and non-college peer). The results supported the prediction that a common frame of reference explained the relationship between identity and role performance and provides a link to the present research related to military identity and role related behaviors. As noted in the organizational socialization literature, a common frame of reference is rooted in the



congruence between organizational and individual values. For instance, midshipman role behavior will more likely be enacted when a common frame of reference (values) exists between role behaviors and the salient role identity and because the role behavior is viewed as an opportunity to reinforce the identity and engage in valued behavior.

In a second study of the same sample, Burke and Reitzes (1991) measured commitment to identity in order to assess how action is initiated and sustained in individuals. The authors suggest that identities operate within a cybernetic control process that allows a comparison of inputs (reflected appraisals) with identities and resulting outputs, or a pattern of behavior that occurs in repetition until inputs match identity (1991:242). Using this process, they suggest that commitment has both cognitive and socioemotional bases, the sum of which influences people to seek congruence between identity and the reflected appraisals from the social setting (1991:243).

The authors hypothesize that commitment influences the relationship between identity and behavior and that this relationship will be stronger for those with more commitment than for others (Burke and Reitzes 1991). The study also assessed the extent to which commitment moderates the strength of the link between identity and behavior. The authors hypothesized that the higher the salience of identity (academic responsibility), the greater the probability of role behavior (time in role, GPA, and expected adjustment) and, for those subjects with higher commitment, the stronger the relationships (Burke and Reitzes 1991).

For all but one case, the regression analysis of identity and commitment on role behavior confirmed that as the strength of commitment increases, the relationship between identity and role behavior becomes stronger, even when other sources of

commitment are controlled. The strongest relationship, as predicted by Burke and Reitzes (1991), occurs with both the highest levels of commitment and the highest role identity, suggesting that commitment is directed not at maintaining a line of activity, but toward maintaining the identity reflected by the activity. Applied to the present research, higher levels of commitment to a salient midshipman or personal work identity would be realized in role appropriate behavioral outcomes, such as more time spent in midshipman leadership roles, higher evaluations of midshipman role behavior, and preferences for continued work in a military context.

Burke (1991) extended the process model of identity theory by hypothesizing that changes in the relationship between social stress and identity is similar to the functioning of cognitive dissonance theory on attitudes about objects. In this relationship identity and stress are related to the extent that a discrepancy, or interruption, in the identity process results in an inability to enact behaviors that influence the reflected appraisals of others (Burke 1991). Furthermore, Burke (1991) hypothesizes that greater stress will result from interruption of more salient and more committed identities and the magnitude of distress experienced will be a function of the severity of the interruption. Four situations are identified in which interrupted identities may result in stress. Two of those situations are relevant to the present study.

The first situation involves a conflict, or negative connection, between two or more role identities, similar to that encountered in role conflict (Stryker and Macke 1978) in which the maintenance of one role identity results in other identities being interrupted. For midshipmen, the transition to college and military life entails the assumption of several important new roles such as college student, midshipman, and military service

member. The individual is placed in a situation in which the commitment to and maintenance of pre-existing roles identities such as son or daughter and boyfriend or girlfriend must be limited or interrupted periodically. According to Burke (1991), this interference will result in distress to the extent that highly salient identities to which one is committed are interrupted. Research by Thoits (1983; 1986) highlighted a finding that while particular combinations of identities may result in increased stress, an increased number of salient identities may provide support and complementary identities during periods of transition or interruption. Thus, individuals with just a few very important role identities may experience greater stress as a result of the interruption of a highly salient identity.

The second condition of interruption identified by Burke (1991) is a situation in which individuals are faced with a very tightly controlled, or over-controlled, identity process. He defines the tightly controlled process as one in which reflected appraisals are closely matched to the identity and any discrepancy at all results in stress (1991:843). In most other situations, discrepancies must be large or severe for stress to occur. In the life of a midshipman, role expectations are tightly controlled and extremely demanding. This controlling process is most severe upon initiation to the organization and any discrepancies or deviations from midshipman role behavior results in fear of punishment. While the organization maintains tightly controlled behavioral expectations of all midshipmen throughout the four years of residence, the tightness of the identity process would be expected to lessen as midshipmen are provided more and varied opportunities to enact role behaviors as upperclass students. Thus, one would expect to see greater stress resulting from interruption in salient identities in the tightly controlled identity

processes of new midshipmen rather than those of midshipmen with fewer controls and less rigid behavioral expectations.

Burke (1991) also notes that in situations where changes in behavior fail to resolve incongruence between identity and self-perceptions, changes in identity itself may result. As an example, situations of extreme, prolonged stress experienced in concentration or prisoner of war camps interrupt and destroy the preexisting identity processes, while the initiation techniques of such “total institutions” provide new, salient identities that, when enacted, reduce stress (Burke 1991). Although considerably less severe than the concentration camp experience, plebe summer indoctrination serves the purpose of interrupting, or severing, previous relationships and identities and introducing new identities as midshipmen and college students. To the extent that this indoctrination process and severing from previous identities is continual and stressful and the alternative midshipman identity process is viewed as potentially stress-reducing, midshipman identity will become more salient as a result of (1) the severity of the experience and (2) greater time spent within the organization.

In another study of role identity salience, Callero (1985) highlighted a specific role identity and helping behavior, that of regular blood donor. This identity and activity, though less common than those of work, family, and religion, offered a less ambiguous behavioral-identity relationship and a defined population in which to study the relationship. Callero (1985:206) predicted that specific role-identity salience would be positively associated with self-definition of this helping behavior. To accomplish this, Callero (1985) created a blood donor salience scale, along with work and family salience scales that, when summated, provided a measure of the relative salience of different

individual identities. The summated scales were correlated with independent identity rankings of blood donor, worker, and family member. Among these three scales, the worker identity reflected both the highest salience scale and rank scores.

Callero (1985) also investigated the link between role identity and future behavior and predicted that higher salience of the blood donor role identity would be positively associated with future donations. He also noted that findings by Burke and Reitzes (1981) and Stryker and Serpe (1994) provided evidence that self-definitions and interpersonal relationships affected role identity behavior and predicted that each, in turn, would be correlated with identity salience and serve to explain future role identity behavior. The study demonstrated that higher identity salience and role definitions explain significant variance in future role behaviors even for very specific and relatively insignificant role identities. Likewise, this study and follow-on research on helping behavior and the self-concept (Callero, Howard, and Piliavan 1987) highlight an underlying relationship between identity salience and more general self-definitions that are explained in terms of individual values and personal identity. The relationship between identity salience and future role behavior supports the present research on midshipman role identity salience and preferences for future occupations and career plans. In this case, a more salient midshipmen role identity may result in preferences for military work and intentions to make the military a career.

Hitlin (2003) validated the relationship between value orientations and personal identity by empirically demonstrating that values unify personal identity and are linked to the formation of a specific role identity. In a manner similar to Callero and colleagues (1985; 1987), Hitlin (2003) studied the relationship between personal identity, reflected

in values measured along the dimension of self-enhancement and self-transcendence, and volunteer role identity behaviors. He argues that, while most identity theorists acknowledge the existence of personal identity, none specifically engage it to explain theory or relationships. In this case, personal identity is defined as a conceptual cohesiveness in relation to the self, both unique and socially patterned by value orientations (Hitlin 2003:122-123). Furthermore, personal identity is a product of value commitments measured by the strength of individual value structures (Hitlin 2003:124).

Hitlin (2003:122) argues that the defining, cohesive feature of values results in a “unified, transsituational personal identity” that influences individual role-identities as well as group-based social identities. If values are conceived as stable, transsituational conceptions of the desirable that motivate goal directed behavior (Rokeach 1970; Smith and Schwartz 1997), then personal identity, to the extent that it is anchored in such value orientations, will serve as the core of the self, and role and group identity salience and behaviors will be consistent and reinforcing of underlying values (Hitlin 2003). In other words, value structures will influence individual choices of behavior and situations that reinforce those values and the personal identity.

Using longitudinal data collected for a study of college student self-concepts, Hitlin (2003) assessed the influence of values on volunteer identity and found that benevolence and universalism were both positive and significantly related to this role identity. Hitlin (2003) concludes that not only are values a cohesive force within the personal identity, but that they serve as a means to understand both individual role and group based identities, thus unifying disparate strands of identity and social identity theory. He also argues that the very emotion-laden nature of values provide potential

links between values, personal identity, and social structural variables like race and gender, adding depth to identity research that has heretofore not existed (Hitlin 2003).

The concept of a personal work identity or a professional military career orientation, much like the volunteer identity (Hitlin 2003) and helping behavior identity (Callero 1985; Callero et al. 1987), is utilized in this research to study values related to work and occupations as a cohesive force underlying specific role identities and behaviors. In this case, it is expected that there will be a positive association between job values, personal work identity (or work belief strength), midshipman role identity, and military occupational plans and preferences. It is predicted that midshipmen with both strong work beliefs and high midshipman role identity will be most likely to select military work and express the strongest preferences for a career in the military. The youth job values literature that follows highlights the importance of this relationship between occupational orientations and individual work plans and behaviors.

### Youth Job Values

Much of the research on youth values falls into a few distinct categories. First, there are studies that address social and cultural change and youth values considered from a developmental (Erikson 1963a; Keniston 1965) or a cohort perspective (Easterlin and Crimmins 1991; Ryder 1965). Next, a great deal of research includes social structural influences of youth values, typically in terms of gender, racial, and family roles (Alwin and Thornton 1984; Cohen et al. 1995; Demo and Hughes 1990; Thornton 1989; Thornton, Alwin, and Camburn 1983). Yet another primary area of research, and a central focus of the present study, is youth occupational or job values (Beutel and Marini 1995; Johnson 2002; Johnson and Elder 2002; Johnson 2001; Kohn and Schooler 1982;

Lindsay and Knox 1984; Marini et al. 1996; Mortimer and Lorence 1979b; Mortimer, Pimentel, Ryu, Nash, and Lee 1996). In this research, youth job values function as a unifying concept for personal identity, value orientations, and organizational socialization. The most prominent themes and frameworks in the literature on values and pertinent research on youth job values will be addressed below.

While earlier functionalist approaches to the study of values fell to criticism, grounded approaches such as the work on social structural determinants of values and parental socialization of youth values (Kohn 1959; Kohn and Schooler 1969) and Rokeach's (1970) elaboration of instrumental and terminal values (desired means and desired ends), value change, and value-behavior relationship, advanced research in this area (Spates 1983). The basic characteristics of values that flow from previous research and pertain to the present study hold that values: (1) are beliefs that, when activated, become infused with feeling; (2) refer to desirable goals and modes of conduct to promote such goals; (3) are transsituational; (4) serve as standards and guide selection and evaluation of behavior, people, and events; and (5) are hierarchically arranged (Hitlin 2003; Rokeach 1970; Smith and Schwartz 1997).

Research beginning with Kohn (1959) and continuing through Rokeach (1970) to the present has claimed a link between values and behavior (Ajzen 1991; Ajzen and Fishbein 1980), but the empirical evidence of such a link has been less than satisfying (Charng, Piliavin, and Callero 1988; Hitlin 2003). Attempts to ground the value-behavior relationship in identity as proposed by Charng and colleagues (1988) and studied by Hitlin (2003) are a step in the direction of testing and validating this long-assumed relationship argued by Spates (1983).



Specifically, Hitlin (2003) argues that a relationship exists between personal values and personal identities and that through the experiences of personal identities, role and group, or social identities are constructed and enacted. In a sense, it may be that values serve as a measure of commitment to personal identity in a manner similar to the way that valued ties and meanings express commitment to a salient role identity. Thus, personal identity is transsituational, as it is constructed of similarly transsituational and cohesive values. Hitlin (2003) argues also that values, like personal identity, are subject to experiences and reflection and are capable of modification over time. He does not test this latter argument, but the present study's assessment of organizational socialization experiences of midshipmen provides insights into value and personal identity differences and change over time. Besides identity theory, other approaches to understanding value change, such as cognitive dissonance theory and reference group behavior (Bem 1970; Jones 1998; Kemper 1968; Merton and Kitt 1950; Singer 1990), offer possible explanations and have been associated with both organizational socialization literatures as well as research on college effects (Davis 1966; Van Maanen 1975).

The research on job values has centered primarily on the extrinsic (financial and social recognition) and intrinsic (interesting, challenging and self-actualizing) rewards of work; however, studies beginning with Mortimer and Lorence (1979a) have identified multiple domains of influence in the rewards of work. These other domains are altruism (help and service to others), social (level of personal contact with others), influence (responsibility and decision-making), leisure (level of free time and pace/supervision of job), and security (geographic and personal stability) (Beutel and Marini 1995; Herzog 1982; Johnson 2002; Johnson and Elder 2002; Johnson 2001; Marini et al. 1996;

Mortimer and Lorence 1979b). Much of the literature that attends to youth job values has focused on the generational and cohort value changes of youth over time as well as differences in value orientations by gender, race, and social structural factors, such as education, parental occupations, and religion.

The cohort and generational studies highlight that the 1960s and early 1970s marked a trend in youth job values toward intrinsic rewards of idealism, independence, personal responsibility and achievement (Hoge, Luna, and Miller 1981; Ondrack 1973). The period from the 1970s through the middle 1980s was characterized by youth preferences for extrinsic rewards like pay and status along with accompanying shifts towards conservatism (Easterlin and Crimmins 1991). The research on gender differences in youth job values has reflected the influences of family, educational socialization, and the substantive structural and cultural changes in gender attitudes and the work roles of women over the past thirty years (Johnson 2001). For instance, the literature provides considerable support for the influence of gender norm socialization of youth toward more egalitarian ideas of gender in society (Leuptow 1980; Marini et al. 1996; Thornton et al. 1983). Research also highlights the distinctive challenges women face in balancing competing and often conflicting work and family values (Aronson 1999; Moen and Erickson 1995; Moen, Erikson, and Dempster-McClain 1997).

The literature on gender differences in youth job values also highlights interesting changes over time in youth orientations toward work. Between 1976 and 1980, Herzog (1982) studied the job values of high school seniors and found that females favored intrinsic, altruistic and social values more highly than males, whereas, males favored extrinsic, influence, security, and leisure values more highly than females. These value

orientations corresponded to what were considered “traditional” gender norms for work in the 1960s and early 1970s (Herzog 1982). In a study that extended the original dataset from 1976 to 1991, Marini and colleagues (1996) identified several areas where male and female job values were becoming less dissimilar. Specifically, the differences between males and females on extrinsic, influence, and security values had disappeared by 1991 due largely to changes in female orientations (Marini et al. 1996). These authors attribute changes in female job values to general societal value changes and by increasing exposure of young women to models of full-time working women facing the challenges of balancing, no longer just work, but full-time careers and family responsibilities.

Table 3.1 provides a summary of the research findings on gender differences in youth job values in the 1970s and again in the early 1990s. This table highlights the fact that female youth have consistently favored intrinsic, altruistic, and social job values more than males, while males have favored only leisure values more than females during both periods. For extrinsic, influence, and security job values, the gender differences observed in the 1970s had largely disappeared by the 1990s. It appears that gender continues to play a role in the job values of young women, but not in the characteristics most associated with traditional work and organizational functioning (e.g., influence, decision-making, pay, status, and advancement). In this sense, women have adopted men’s orientations toward work.

Of all the job values literature, however, that which deals with the socializing effects of work and education is most relevant to the present study of job values, personal identity, and occupational preferences of Naval Academy midshipmen. In particular, Mortimer and colleagues (1979a; 1979b; 1996) extended the work on class, occupations,

and values (Kohn and Schooler 1969) to include the relationship between job values and occupational choice, as well as the relationship between work experience, or socialization to work, and later job values. Both the occupational, or self-selection and occupational socialization hypotheses were assessed through a longitudinal study of male college seniors conducted just prior to graduation and again ten years following graduation. By self-selection, one means that job values form as a result of early socialization experiences and remain relatively stable throughout adulthood, serving as a standard and guide to choosing an occupation. The socialization hypothesis predicts that differences attributed initially to self-selection will be intensified by the experiences of work, resulting in outcomes attributed to both hypotheses (Mortimer and Lorence 1979b).

**Table 3.1 Gender Differences in Youth Job Values 1970s to 1990s  
(Herzog 1982; Marini et al. 1996)**

<b>Job Values</b>	<b>Mid-1970s</b>	<b>Mid-1990s</b>
Intrinsic Rewards	Favored by Females	Favored by Females
Altruistic Rewards	Favored by Females	Favored by Females
Social Rewards	Favored by Females	Favored by Females
Security Rewards	Favored by Females	No Gender Difference
Extrinsic Rewards	Favored by Males	No Gender Difference
Influence Rewards	Favored by Males	No Gender Difference
Leisure Rewards	Favored by Males	Favored by Males

The authors predicted that extrinsic, intrinsic, and social or people values expressed in the senior year of college would influence selection of an occupation that reinforced this value orientation, while the reinforcing experiences of work would intensify college value orientations. Through structural equation modeling the study confirmed both hypotheses supporting the notion of selection to and organizational socialization of job values. This also demonstrated that values, while transsituational,

stable, and highly predictive of occupational choice and future value orientations, are not unchangeable (Mortimer and Lorence 1979b). The major criticism leveled against this study, however, is its reliance on a very elite sample of college-educated males, thus limiting its generalizability (Lindsay and Knox 1984).

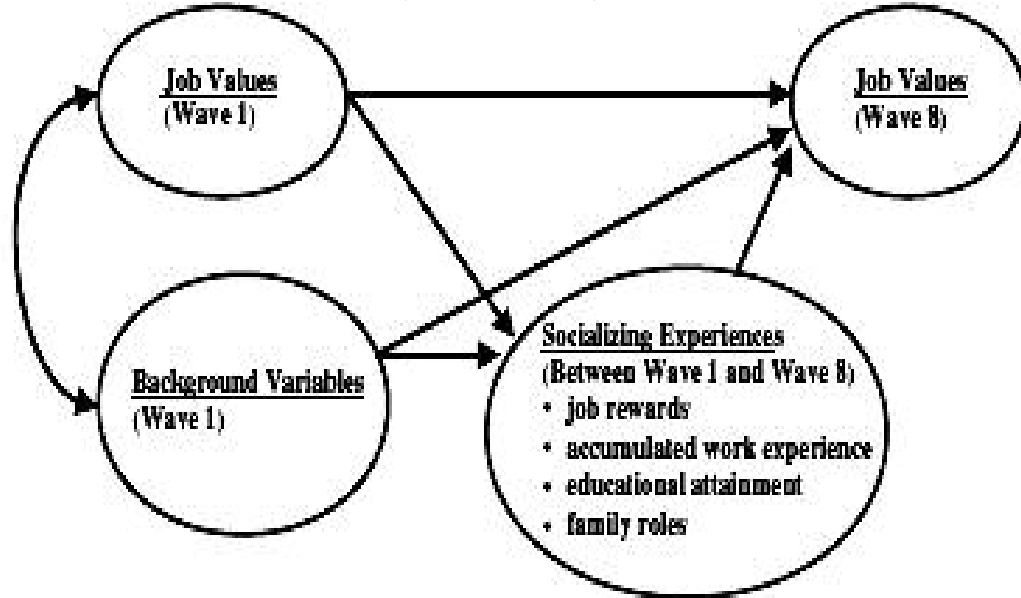
A follow-on study by Lindsay and Knox (1984) replicated the self-selection and socialization hypotheses for a nationally representative sample of high school seniors while including additional tests for the effects of educational attainment and social structure (Lindsay and Knox 1984). The specific hypotheses and research design related to educational attainment mirror the occupational selection and socialization hypotheses of the earlier studies and predict that preexisting values influence self-selection to educational institutions and the educational experience to which one self-selects influences individual value orientations. The authors also tested the effects of education on occupational choice and the overall effects of social status (Lindsay and Knox 1984). Using structural equation modeling again, a good fitting model of job value stability and change over time emerged. The model supported the hypothesis as well as the more generalizable claim that youth occupational choice is a process in which values are mediated by educational attainment (Lindsay and Knox 1984). Likewise, this study provided even more evidence that race and gender influence both job values and occupational choice.

Finally, in a series of studies on youth job value changes, Johnson and colleagues (2001; 2002; 2002) utilized panel data from the Monitoring the Future (MTF) study of American Youth (Bachman, Johnston, and O'Malley 2001) to assess the influence of various social structural and socio-demographic factors on youth job values. In the first

study, Johnson (2001) studied two central questions related to the literature on youth job values. First, she asked whether the substance and nature of the transition from youth to adulthood has an effect on youth job values or whether the influence of prior orientations formed in the family, in school, and through peers has priority. Second, she asked whether the traditionally idealistic value orientations of youth exhibited marked shifts or stability during this period of change and personal growth and whether the gender distinctions present in cross-sectional studies of job values changed or remained the same over time. The results showed that, over time, cohort job values tended to become less idealistic than during the senior year of high school and that the gender differences present in high school orientations decreased, but not to the point of disappearing (Johnson 2001). The gender differences in job values were similar to those found in the MTF cross-sectional data of Herzog (1982) and Marini and colleagues (1996) with the exception that males favored extrinsic values more than females throughout the period.

The results presented by Johnson (2001) and modeled in Figure 3.4, show direct effects for self-selection (prior values), prior experiences, and socializing experiences, but the selection effects (prior values) were not as strong as the effects of work experiences (job rewards) and background factors. In addition, Johnson's (2001) research supported the hypothesis that as youth experience work, they temper their more idealistic job values, possibly in response to an inability to attain certain rewards in work or as a result of conflicting and differing roles associated with the transition to adulthood (Johnson 2001).

**Figure 3.4 Research Model for Change in Job Values  
(Johnson 2001)**



In two follow-on studies using the same dataset, latent growth analysis was used to assess initial levels of youth values and patterns of change over time based on various structural and socio-demographic factors (Johnson 2002; Johnson and Elder 2002). In the first of these two studies, social characteristics, namely gender and race, were influential in both initial youth job values as well as in the trajectories of change that occurred during the transition to adulthood, contrasting the prevailing views that values are shaped early on and remain largely stable across the life course (Johnson 2002). Other social determinants such as religiosity, educational attainment, and work experience influenced youth job values to a lesser degree (Johnson 2002). In addition, Johnson (2002) found that youth tend to value many things very highly, confirming what previous research has documented (Beutel and Marini 1995; Marini et al. 1996) as the overly idealistic nature of adolescence. With the exception of a slight increase in the value placed on job security, youth had lower job value orientations over the approximately 12 years following graduation from high school (Johnson 2002).

In another study of youth job values, Johnson and Elder (2002) found that the educational pathways of individuals affected not only the initial levels, but also the trajectories of the job values held by youth in transition to adulthood. This is particularly relevant to the present study because it provided much needed evidence that differences do exist between those individuals who attend college and those who do not. Based on longitudinal panel data from the Monitoring the Future study, Johnson and Elder (2002) found that those youth who attended college valued security much less and decreased even more over time than youth who did not attend college. In addition, college attendees valued the influence characteristics of a job more than others and their preference for the influence rewards in work increased over time while the levels for others remained flat or decreased. For the other value dimensions (extrinsic, intrinsic, altruistic, and social) there were only minor differences between groups and the general trend for all youth was a decrease over time (Johnson and Elder 2002).

The findings presented in the literature on youth job values provide direct links and highlight key variables in the relationship between organizational socialization, values, personal identity, and role related behaviors. The youth job values literature highlights the influence of prior orientations, social structure, and socializing experiences, as well as the effects of trajectory, or educational and occupational plans, on youth job values. This study of youth orientations at the Naval Academy employs civilian and midshipmen plans for college and military service as an occupational trajectory to test group differences in youth job values. In addition this study assesses the pattern of the midshipmen orientations during four years in residence at the Naval Academy to understand whether midshipmen orientations are overly idealistic at entry



and whether or not they are different over time or different for midshipmen who have been in the organization for a longer period of time.

### **Identity, Values, and Professional Socialization in a Military Education Setting**

The bureaucratic structure, organization, and functions of military forces in a democratic society have been the topic of much study in the social sciences. Aside from the unique function military forces serve, Vidich and Stein (1960) outlined the following properties of military institutions that separate them from other bureaucratic structures and highlight the challenges of transforming individualistic behavior that characterizes civilian life to the collective behavior of military life (Vidich and Stein 1960). While these general concepts were formed to describe the mass industrialized military of the Cold War, they still apply to the complexity and interoperability issues facing military operations in many parts of the world today.

- Rapid expansion and contraction that requires forming consensus from disparate groups and individuals;
- Individual interchangeability at all levels that requires predictable performance; and
- Generalized attitude toward authority that remains despite combat loss (1960:493).

Segal and Segal (1983) highlight the major changes in military bureaucracy and organization and the accompanying personnel challenges that have emerged over time. It has been suggested that the reason the military is capable of surmounting the systemic challenges and achieving the subject transformation of individuals is because of characteristics of the “total institution” that force change in persons (Goffman 1960). Subsequent literature, however, has shown that only certain aspects of military life (e.g., enlisted boot camp, military academy plebe summer) model most nearly the “total institution” (Rosa and Stevens 1986). As a result, the hypothesized effects of Naval

Academy socialization on values and personal identity is viewed from a broader perspective that includes the literature on values, identity, and role identity behaviors in a military service academy environment.

In one of the more highly cited essays on organizational socialization, Dornbusch (1955) provides the first account of modes and functions of socialization in a military environment. At the service academy, a twofold process provides both technical skill training and education in institutional values, identities, and behaviors, whereby a “unity of experience and orientation” fosters identification with the group and the larger organization (Dornbusch 1955:316). The processes of mortification, training, and assimilation highlight the informal aspects of identity change, whereby new cadets are stripped of preexisting statuses and assigned to extraordinarily low status positions for a period of time and then gradually provided higher status upon successful demonstration of desired skills, abilities, and values (Dornbusch 1955). Upon completion of the rigorous indoctrination process, cadets are provided higher status and rewards as members of an elite group that builds self-esteem, fosters further identification with the institutional values and behaviors, and prepares them for future higher status roles as officers (Dornbusch 1955).

Lovell (1976; 1979) has written on the organizational and cultural changes that have occurred over the years in federal military service academies and chronicled the ever-present struggle to balance an environment favoring neither “Athens nor Sparta”. In other words, a process that balances academic rigor and military discipline characterizes the service academy culture. Prior to conducting this research, he conducted a study of the effects of value socialization on West Point cadets and civilian college students

(Lovell 1964). In this study, he compared a cross-section of cadet value responses to those of male college students attending an Ivy-League college (Lovell 1964). U.S. Military Academy cadets expressed small, but non-significant differences in orientations to military roles across the four cadet cohorts, indicating the possibility of a self-selection bias existing in the orientations of cadets. Likewise, the results also showed that while cadets consistently held more conservative geopolitical orientations than comparative groups of civilian college males, the differences, although significant, were not very large, suggesting that the nature of both groups and organizations might predispose individuals who are more conservative to choose these environments (Lovell 1964). While the results of this study may be attributed to the biases of a cross-sectional rather than longitudinal design, they highlighted the fact that cadets as a group tended to be more conservative than civilian peers and that little to no differentiation in professional orientations emerged in four classes of cadets. This study, however, failed to isolate the effects of self-selection to West Point by not obtaining the responses of cadets as they arrived at the Military Academy.

Stevens and colleagues (1994) studied the values of a longitudinal panel of Coast Guard Academy cadets at indoctrination and upon graduation and found significant increases in values related to practical mindedness, variety, recognition, independence, and leadership while the values of goal orientation, conformity, and benevolence decreased. While the changes in values are apparent, the causes of change are not because other studies have highlighted similar shifts in value orientations for students during college (Astin 1977; Feldman and Newcomb 1969; Pascarella and Terenzini 1991). This study also provides strong evidence supporting the theory of individual self-

selection to the organization. When the value orientations of entering freshmen were compared to civilian freshmen, differences in the mean scores of Coast Guard cadets and civilian freshmen college students were statistically significant, with cadets much higher in conformity and lower on independence than civilian peers (Stevens and Rosa 1994).

In another study of cadet value orientations, Hammill and colleagues (1995) employed the work of Kohn and Schooler (1982) and studied parental socioeconomic status and social structure and cadet orientations related to self-direction and conformity. They hypothesized that cadet values of conformity and self-direction would be related to parental socioeconomic status, but instead found no support for the Kohn thesis on any of the social structural variables. The fact that first year cadets expressed tremendous uniformity in their values of conformity demonstrated some support for the assertion that self-selection into a career results in a stronger adoption of the occupation's norms and values (Hammill et al. 1995). Another explanation for the strength of these value orientations may be related to cognitive dissonance theory, in which the decision to remain in the academy following a severe indoctrination process results in an attempt to reduce dissonance through an attraction to organizational values and behaviors. Other factors may yet be at work as demonstrated in another study of the severity of initiation in military indoctrination in Canadian military college officer cadets (Guimond 1995). In this study, negative attitudes were observed immediately following the harsh initiation into the organization, but a metamorphosis to congruent organizational values occurred by the end of the training process. In this case, however, cadet participation in leadership roles during the final year of training explained a significant amount of the variance in professional values throughout the period (Guimond 1995).

Priest and Beach (1998) conducted a study that assessed changes in value orientations over time in both military and civilian settings. They hypothesized that value orientations of cadets and their peers at a civilian college would exhibit similar changes due to general college effects coincident with educational growth and maturity (Priest and Beach 1998). For nearly all of the measures, cadet value orientations remained slightly higher than civilian peers, lending further support to the self-selection hypotheses found in the literatures on organizational socialization, college effects, and youth job values. The research also showed that statistically significant increases in both military and civilian values for autonomy occurred over time, but increases in cadet values of conformity over time were not statistically significant. The authors attributed these results to the potential of measurement bias and problems of differential sampling designs and data sets (Priest and Beach 1998). This study provided evidence that traditional college effects for autonomy emerge in an environment where autonomy is neither desired nor encouraged and must result from another process or form of socialization.

Franke (1998; 2000) investigated the influence of social categorization and group identification on military and political values of West Point cadets. In the first study, the value orientations of a cross section of cadets were compared to a sample of senior Army officers attending the Army War College to assess the cognitive preparedness for different missions at different training and experience points (Franke 1998). While all cohorts expressed high levels of patriotism, the officer cohort was highest. Cadets, however, rated peacekeeping higher than officers did. First Class cadets rated warriorism highest, while Fourth Class cadets were consistently lowest. The primary conclusion of this study is that the organization provides salient reference groups and values that may

contribute to the formation of values. A criticism, however, is that the cross-sectional design limits the ability to generalize the effects to organizational socialization.

In a second study, Franke (2000) employed the same value scales to assess the effects of social identity theory on group identification, value orientations, and career intentions. He predicted that identification with a military or national identity would increase across class years and that cadets with a higher military or national social identity would express both higher patriotic and warrior value orientations as well as greater commitment to a military career (Franke 2000). Cadet orientations strongly and positively related to the values that closely defined the prevailing military identity group of the cadet. In each case, cadets tended to rate values of warriorism and patriotism, and conservatism, higher than ratings for peacekeeping, global institutionalism, and Machiavellianism (Franke 2000). With the exception of the fourth class cadets, family was the most frequently rated central identity among the cadet classes. Contrary to the hypothesized direction, a central military identity rating did not increase from the fourth to the first class cadets. However, rating the military identity in the top three identities did increase, suggesting a socialization effect exists in the organization. The results also confirmed the hypothesis that cadets who identified with the military were more committed to a career in the military. From these studies, Franke (1998; 2000) concluded that the military academy helps socialize cadets to the most salient work roles, or group identities they will undertake upon graduation by influencing the personal values that support these missions and roles.

The preceding sections have presented the constructs and identified the issues to be studied in this project. The literature on organizational socialization highlights the

processes at work while the college effects and professional school socialization literature identify common contexts and variables related to research on education and occupational orientations. The literature on role identity and job values provide specific variables to be studied in this research and the previous research on cadet orientations at West Point provides a backdrop to research in a similar organizational context. The section that follows advances the issues in the review of the literature and formulates specific research hypotheses to be tested and analyzed.

## Chapter 4 Hypotheses

Returning to the theoretical perspectives and literature informing this project, the hypotheses are based on the proposal that the orientations, role identities, and role behaviors of youth entering the Naval Academy are indeed a reflection of the self-selection, anticipatory socialization, and selection of individuals to the military organization. In addition, the orientations of midshipmen are influenced by a process of shaping and organizational socialization that occurs during the dynamic and often turbulent transition from youth to adulthood and ultimately into the world of work.

The research that follows investigates whether or not there is an effect associated with attending the Naval Academy and if so, the nature, extent, and substance of it. First, the research provides a glimpse into if and how the orientations and role behaviors of youth transitioning to adulthood and careers in the military are shaped by attendance at the Naval Academy and second, it provides a prospective view of lives to be lived in terms of behavior, occupational plans, and the valued nature of future work. While the literature reviewed thus far provides evidence that hypothesized effects of socialization in colleges, professional schools, and in a military service academy setting seem to exist, such effects have been often confounded methodologically or have not been statistically or substantively significant (Feldman 1971; Johnson and Elder 2002; Knox et al. 1993; Pascarella and Terenzini 1991).

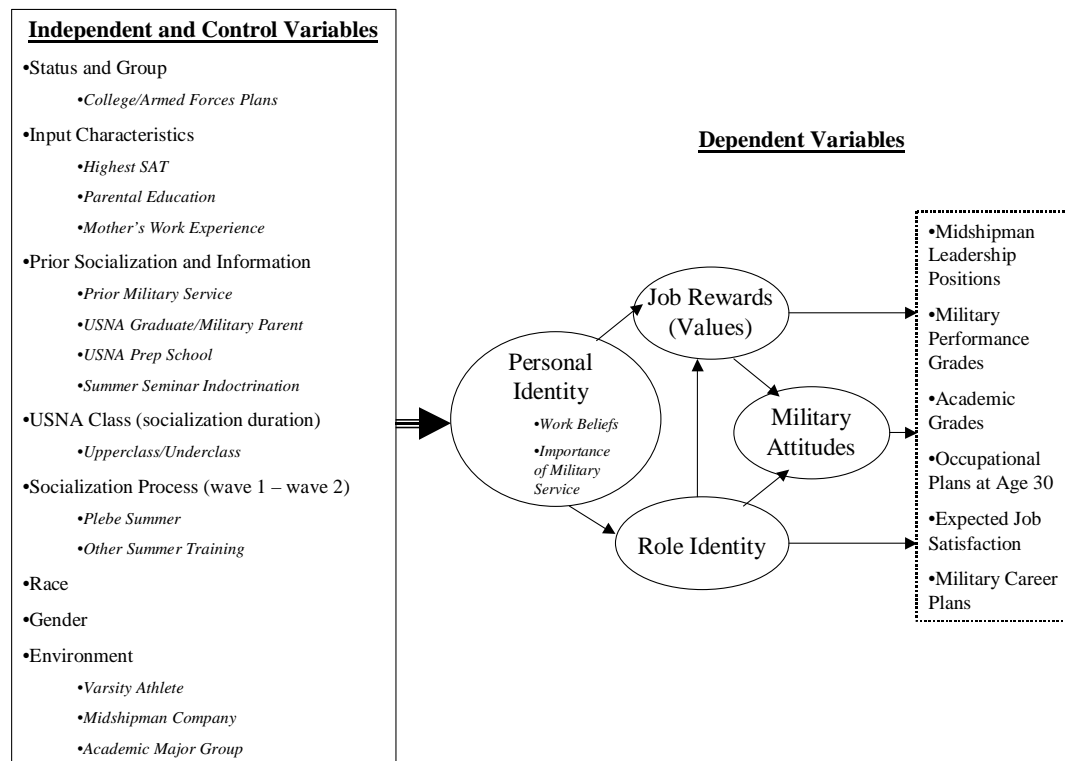
The present research assesses this issue once again using a theoretically relevant model of organizational socialization and by considering empirically grounded variables. While many of the college effects models attempt to understand the input-environment-output (I-E-O) relationship (Astin 1993), the present study involves one very specialized



environment (the Naval Academy) that is assumed to present very influential effects. While controlling for some aspects of the environment in the conceptual model, the present research considers primarily the individual input and output aspects associated with this particular college experience. Future research would be useful in distilling the many environmental factors associated with attendance at the Academy. The model that describes the organizational socialization of midshipmen values and identity is provided in Figure 4.1.

In this model, the primary effects of selection, self-selection, anticipatory socialization, and organizational socialization are hypothesized to influence the orientations of incoming midshipmen. These effects are to the left of the model in the solid box. The orientations of midshipmen (work beliefs, job values, military attitudes, and role identities) are conceptualized as dependent variables for this portion of the model and are found inside the circles at the center of the model. In the second portion of the model, the orientations of midshipmen are hypothesized to affect their behaviors, plans, and preferences. The personal identity and individual orientations become predictor variables for the outcome variables located in the dashed box on the right. Clearly, of all of the outcome variables, the career expectations of midshipmen provide the greatest measure of the process of organizational socialization at the Academy. It is in the long-term career expectations that the effect of the personal identity or the professional military career orientation is expected to be greatest.

**Figure 4.1 Model of Differential Socialization of Values and Identity in Midshipmen**



From the literature on socialization and values at the Military Academy it is hypothesized that self-selection is an important aspect of midshipmen orientations (Priest and Beach 1998; Franke 1998; 2000). From the review of organizational socialization and college effects research, it is hypothesized that duration of socialization as well as the type and form of socialization influence orientations (Astin 1993; Chatman 1991; Feldman 1981; Kraimer 1997; Pascarella and Terenzini 1991). From the literature on youth job values it is hypothesized that race, gender, and parental background influence individual orientations and that they play an important role in the formation of work belief strength and job values (Johnson 2001; Johnson and Elder 2002; Lindsay and Knox 1984; Mortimer and Lorence 1979b).

From identity theory, the relationship between role identity salience and identity commitment (a function of greater congruence between individual and organization values) affect role behavior (Burke and Reitzes 1991; Foote 1951; Hitlin 2003). It is hypothesized that high role identity salience alone, much like value congruence in Kraimer's (1997) model, is not sufficient to promote action, but needs commitment to function completely. A central, stable, and transsituational personal identity (Hitlin 2003) is a measure of the importance of military service and work to an individual or one's professional military career orientation and is an important factor in the relationship between identity commitment and salience. This personal identity is expected to change less over time, be affected less by the rigors of the Academy experience, while being highly predictive of personal and organizational outcomes.

The matrix in Figure 4.2 outlines the hypothesized relationship between identity salience and work belief strength as applied to the present research setting. Similar to Kraimer's (1997) study of organizational outcomes, it is predicted in this study that the most positive individual outcomes will occur under conditions of high identity salience and strong work beliefs. Moreover, it is predicted that the least positive organizational outcomes do not emerge under conditions of low identity and weak belief strength, but when belief strength is high and identity salience is low. For example, those midshipmen expressing both high identity salience and strong work beliefs will be more likely to say they expect to be serving in the military at age 30, be satisfied with that work, and expect to pursue a military career. In other words, those midshipmen will be the most positive and certain in their orientations toward military work. Conversely, those midshipmen with low identity salience and weak belief strength will have the least certain individual

plans regarding future military work, while midshipmen with low identity salience yet strong work beliefs will be most certain in their plans not to pursue military work.

**Figure 4.2 Relationship Between Midshipman Work Belief Strength and Identity Salience**

		<b>Work Beliefs</b>	
		Weak	Strong
<b>USNA Identity Salience</b>	High	<ul style="list-style-type: none"> <li>•Military Job at Age 30</li> <li>•Low Job Satisfaction</li> <li>•Uncertain Military Career</li> </ul>	<ul style="list-style-type: none"> <li>•Military Job at Age 30</li> <li>•High Job Satisfaction</li> <li>•Yes Military Career</li> </ul>
	Low	<ul style="list-style-type: none"> <li>•No Military Job at Age 30</li> <li>•Low Job Satisfaction</li> <li>•Uncertain Military Career</li> </ul>	<ul style="list-style-type: none"> <li>•No Military Job at Age 30</li> <li>•High Job Satisfaction</li> <li>•No Military Career</li> </ul>

The matrix in Figure 4.2 highlights how, in the case of the Naval Academy, organizational socialization and the Person-Environment Fit model (Chatman 1991; Kraimer 1997; Schneider 1987) function to influence individual and organizational outcome measures. In those instances where there is a better “fit” between the individual and the organization, either as a result of self-selection/anticipatory socialization or the process of organizational socialization, more positive outcomes are expected. Integrating the identity and values literature to the argument, socialization to the military role identity will result more readily than socialization to stronger work beliefs because identity is context and role dependent, whereas work belief strength is central, enduring, and less malleable through processes of organizational socialization. It is therefore expected that differences will emerge in the extent to which organizational socialization affects identity and work beliefs. In addition, it is hypothesized that the centrality or strength of work beliefs will influence outcome measures more than the role identity salience.

The process of organizational socialization of Naval Academy midshipmen is depicted in the model presented in Figure 4.1 and some of the most important predicted outcomes of the relationship between belief strength and identity salience are presented in the matrix in Figure 4.2. Listed below are the four research questions presented at the beginning of this paper and the hypothesized effects motivated by theory and the subsequent review of the literature.

1. What, if any, differences are there in the job values, work beliefs, and military attitudes expressed by incoming midshipmen and civilian high school seniors?
  - a. Because of the restricted range resulting from selection, self-selection, and anticipatory socialization to the value-laden Naval Academy environment, the job values, work beliefs, and military attitudes of incoming midshipmen differ from civilian high school seniors.
    - i. Incoming midshipmen value the influence characteristics of work more than civilian high school seniors.
    - ii. Work is more central and important to incoming midshipmen than civilian high school seniors.
    - iii. The attitudes of incoming midshipmen are more pro-military than those of civilian high school seniors.
  - b. The job values, work beliefs, and military attitudes expressed by incoming women and minority midshipmen will not differ from their male and non-minority peers.
  - c. The job values, work beliefs, and military attitudes of incoming midshipmen vary less than civilian high school seniors.
2. What effect do experiences prior to entering the academy and the length of time spent at the academy have on job values, work beliefs, military attitudes, and military role identities expressed by midshipmen?
  - a. Greater access to socialization agents that provide exposure to accurate and realistic information about the organization and its values prior to entry predicts higher midshipman role identity salience and better

- organizational “fit” at entry, resulting in positive organizational outcomes, specifically more certain military career expectations.
- b. Because of the amount of time spent in the organization, the job values, work beliefs, military attitudes, and role identities expressed by upperclass midshipmen differ from underclass midshipmen.
    - i. The job values and work beliefs of upperclass midshipmen reflect greater realism as they are exposed to diverse experiences, training, and value orientations.
    - ii. The attitudes expressed by upperclass midshipmen are more pro-military than those of underclass midshipmen.
    - iii. Midshipman or other military role identities are more salient for upperclass midshipmen than for underclass midshipmen.
  - c. The job values, work beliefs, military attitudes, and role identities expressed by women and minority midshipmen differ from male and Caucasian midshipmen.
    - i. The job values, work beliefs, military attitudes and role identities will be neither as strong nor as positive because of a perceived lack of “fit” between the individual and the organization and its dominant masculine, Caucasian culture and values.
3. What effect, if any, does the type and form of professional training and socialization have on the job values, work beliefs, and military role identities of midshipmen?
- a. Greater change in the job values, work beliefs, and role identities of midshipmen occurs during the initial period of intensive organizational socialization and training (plebe summer) than during other periods of formal training at the academy.
  - b. Midshipmen role identity salience increases more after initial training and socialization (plebe summer) than after other periods of professional summer training.

- c. The salience of other military identities increase and the military career plans become more certain as midshipmen experience diverse and realistic military training and military role models associated with summer professional training and from a process of anticipatory socialization to expected military work roles upon graduation.
- 4. What is the relationship between the job values, work beliefs, military attitudes, and military role identities of midshipmen and their role related behaviors, occupational plans, and preferences and is there an associated organizational socialization effect?
  - a. High midshipman role identity predicts role appropriate behaviors and higher in-role performance evaluation measures in midshipmen.
  - b. High midshipman role identity predicts greater midshipmen anticipated preferences for and satisfaction with military work at age 30 and with plans to make the military a career.
  - c. Strong midshipman work beliefs and high military role identity salience in midshipmen predict the greatest preferences for and satisfaction with military work at age 30 and with plans to make the military a career.
  - d. The hypothesized relationship between work belief strength and role identity holds for women midshipmen and midshipmen who are members of minority groups.

Through a secondary analysis of survey and demographic data, the argument that military institutions socialize members to a different set of value orientations, role identities, and occupational preferences than civilian peers is assessed. Question number one is addressed by comparing the orientations of freshmen midshipmen at the Naval Academy to those of civilian high school peers (both college-bound and non-college attendees). Tests of independent samples are conducted to assess group differences between midshipmen and high school seniors. Question number two is investigated using

cross-sectional data to assess the orientations of midshipmen at various points in the academy socialization process, beginning with newcomer entry to the organization and ending with senior midshipmen ready to graduate and begin work in the military service. In this section, OLS regression analysis is used to explain the relationship between prior orientations and experiences of incoming midshipmen and their “fit” at entry and ANOVA is conducted to determine whether groups of midshipmen at different stages of the Academy program differ in their orientations. Question number three compares longitudinal panel data and assesses the effects of different forms of formal training and socialization on the orientations of midshipmen. In this section, tests of independent samples for paired (longitudinal) data are used to assess the changes in midshipmen orientations over time. Question number four is answered through an analysis of the effects of midshipman orientations and role identity on near and long-term outcome measures such as midshipman military and academic performance and occupational plans, preferences, and satisfaction. OLS regression analysis is used to explain the relationship between midshipmen orientations and experiences and several important outcomes of organizational socialization.

If the process of organizational socialization at the Naval Academy functions as theorized, individuals receiving the more severe and “total” indoctrination of plebe summer and those enduring the greatest length of socialization will display the greatest level of assimilation to military orientations and roles. In addition, individuals for whom midshipman and military role identities are most salient and for whom work belief strength is greatest will express the most positive and certain occupational plans and preferences for military work. The extent to which individuals come to identify with



these military roles and values (their salience and commitment or belief strength) will explain variations in plans and orientations. The extent to which these hypothesized outcomes are not observed indicates either a failure of the organization to socialize its members effectively or the existence of unidentified informal processes and environmental effects at work.

## **Chapter 5 Data, Methods, and Procedures**

This study investigates the influence of one particular organization (the U.S. Naval Academy) on the orientations of its members (midshipmen). The general research design is a secondary analysis of survey data obtained from publicly available data sources. Guiding the general research design in this study is previous research on organizational socialization, identity theory, and youth values (Beutel and Marini 1995; Burke and Reitzes 1981; Burke and Reitzes 1991; Herzog 1982; Hitlin 2003; Johnson and Elder 2002; Kraimer 1997; Marini et al. 1996) as well as research on the influence of the military and military service academies on youth values and identity (Bachman et al. 1987; Franke 1998; Franke 2000; Hammill et al. 1995; Priest and Beach 1998; Priest et al. 1982; Stevens and Rosa 1994; Woodruff 2003).

### **Data and Initial Sample**

The civilian data set is drawn from the Monitoring the Future (MtF) project, publicly available from the Inter-university Consortium for Political and Social Research (ICPSR) (Bachman et al. 2001). The MtF is a nationally representative annual survey of secondary school seniors from across the coterminous United States on issues concerning drug use and related factors, vocational and educational plans and aspirations, and attitudes about different social institutions. Each April, the survey is administered to between 14,000 and 16,000 high school seniors and a portion of the base year study respondents are followed in a panel design for 13-14 years after high school. The survey includes common demographic and background information and is administered in six different forms each year to similar sized groups of students in order to accommodate a more diverse and larger number of measures while minimizing respondent fatigue.

The MtF samples are generated using a multi-stage random sample design that takes region, schools, and depending on the size of the school, either entire student populations or randomly selected classrooms of students as the sample (Bachman et al. 2001). The Survey Research Center (SRC) staff recruits schools within the same geographic areas of the United States used for other nationally representative samples and provides school administrators with design objectives and confidentiality assurances before the selection of student samples. Since the survey is administered in school, the response rates for each base-year survey are nearly 85% (Bachman et al. 2001).<sup>20</sup>

The questions for this study are drawn from each of six different MtF questionnaire forms. These questions deal primarily with the goals, values, attitudes, plans, and preferences for life and work expressed by high school seniors. In addition, attitudinal measures concerning the military and the common background and demographic measures are used to test differences between the orientations of military and civilian samples. One drawback to using the MtF dataset is that it fails to include individuals no longer in school in the senior year of high school (Bachman et al. 2001). While this may be a limitation when addressing the characteristics of the entire youth population, the limits to the present research are not significant. This study is most concerned with the effects of attending the Naval Academy, another college, or not attending college at all. The effect of including individuals no longer in high school in the MtF data collection would likely accentuate differences already documented between those planning on going to college and other groups (Johnson and Elder 2002) and is, therefore, not considered problematic.

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<sup>20</sup> The base year MtF survey is administered only once and there is no follow-up for non-respondents. Most non-respondents are as a result of absenteeism (Bachman et al. 2001).

The military data set was obtained from the Office of Institutional Research at the U.S. Naval Academy and includes survey data collected from midshipmen in attendance between April and October 2003 as well as data from other publicly available demographic and background files maintained by academy. A majority of the items in the military survey, entitled the Midshipman Attitude Survey (MAS), are excerpted from, or based upon the MtF instrumentation.<sup>21</sup>

The subjects included in the military sample were drawn from college students in attendance at the U. S. Naval Academy in Annapolis, MD. The MAS sample was a 50 percent random cross-section of the Brigade of Midshipmen (total student body of 4,300) in April 2003. Midshipmen were contacted by email and recruited to take the MAS online using a personal computer. Midshipmen accessed the survey through the Office of Institutional Research website and utilized a personal identification number (PIN) to access the secure survey web page. The survey web page remained active for a two-week period and follow-up email contact with midshipmen was made to encourage survey participation.

A total of 1227 midshipmen completed the MAS for an overall response rate of 57%.<sup>22</sup> Table 5.1 provides a breakdown, by academic class, of the sample and respective response rates for the April 2003 dataset. At the time of survey administration, the Class of 2003 were in their senior year, or First Class midshipmen, the Class of 2004 were Second Class midshipmen, or juniors, the Class of 2005 were Third Class midshipmen, or

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<sup>21</sup> One of the primary objectives of the MtF study is to encourage and allow use of the data and instrumentation by the broader field of scholarly research (MtF Aims and Objectives #11) (Johnston, O'Malley, Schulenberg, and Bachman 2001)

<sup>22</sup> The sample was drawn from the total student population of the Naval Academy as of January 2003. The actual response rates are marginally higher because a small number of midshipmen had left the academy between January and April 2003.

sophomores, and the Class of 2006 were completing their Fourth Class year, or freshmen.

**Table 5.1 MAS Distribution and Response Rates at wave 1 by USNA Class**

USNA Class	Brigade / Percent	50% Random Sample / Percent	Respondents / Percent	Response Rate (%)
2003	1004 / 23.4	501 / 23.3	266 / 21.7	53.1
2004	1032 / 24.1	538 / 25.0	317 / 25.8	58.9
2005	1099 / 25.6	529 / 24.6	319 / 26.0	60.3
2006	1150 / 26.8	581 / 27.0	325 / 26.5	55.9
<b>Total</b>	<b>4285 / 100%</b>	<b>2149 / 100.0%</b>	<b>1227 / 100%</b>	<b>57.1%</b>

In July 2003, the Office of Institutional Research administered a paper version of the MAS to a sample of incoming freshmen midshipmen, or Plebes, during their first week of formal plebe summer indoctrination. The respondents were chosen as part of random clusters of midshipmen assigned to 30 plebe summer platoons, which are groups of 40 to 50 midshipmen assigned to live and train together throughout their four years in residence at the academy.<sup>23</sup> From among the 30 platoons in the plebe summer regiment, 4 were chosen at random by the plebe summer Scheduling Officer to take the survey as a part of the normal training day. Of the 203 newcomers to the organization asked to participate, only one respondent failed to complete the survey. Although respondents were provided typical assurances of confidentiality and advised of the voluntary nature of the survey, the high response rate for this initial data collection was probably due, in part, to social desirability bias associated with the large group setting or the potential that respondents felt participation was an important part of the training process.

<sup>23</sup> Female midshipmen comprise approximately 15% of the student population at the academy and they are distributed evenly across each of the platoons within an academic cohort. Incoming male and female midshipmen are then randomly assigned to each of the plebe summer platoons based on this distribution.

In September and October 2003, the Office of Institutional Research conducted follow-up surveys of all of the initial April and July 2003 MAS respondents using two forms of an online survey. The follow-up MAS surveys were shortened versions of the original questionnaires and followed the same protocols and procedures as the first online data collection. The first follow-up survey (September 2003) was directed at the 203 freshmen summer respondents from the July administration. After two weeks of availability, 81 respondents completed the survey (40% response rate). The second follow-up survey was shortened further and participation was solicited from respondents to the first wave of the MAS in April 2003 still at the academy in October 2003 as well as the non-responders from the September 2003 survey. Following two weeks of online availability, the response rate for all follow-up surveys was 83%. Table 5.2 below provides all follow-up response rates for the MAS at wave 2.

**Table 5.2 MAS Follow-up Response Rates at wave 2 by USNA Class**

USNA Class	Base MAS Respondents / Percent	Follow-up Respondents / Percent	Follow-up Response Rate % <sup>24</sup>
2004	317 / 27.3	282 / 29.0	88.9
2005	319 / 27.4	275 / 28.2	85.9
2006	325 / 27.9	289 / 29.7	88.9
2007	203 / 17.4	126 / 13.0	62.1
<b>Total</b>	<b>1164 / 100.0%</b>	<b>972 / 100.0%</b>	<b>83.4%</b>

The overall response rate across all surveys is quite reasonable. However, the potential for response bias exists for a number of reasons. The MAS was administered to

<sup>24</sup> The low follow-up response rate for the Class of 2007 is possibly the result of mode effects of the initial and follow-up survey conditions. Three plebe summer companies of midshipmen were randomly selected to take the survey. Although midshipmen were advised that participation was voluntary, all but one of the midshipmen responded. In Table 5.1, the initial response rates for midshipmen who were contacted by email to take the survey were in the 55-60% range and follow-up response rates were considerably higher (85-89 %). The overall (wave 1-2) response rate for the Class of 2007 (62%) is actually higher than the overall response rates for the other three USNA classes (in the range of 49-52%).

midshipmen online and they were free to take the survey when and wherever they chose. While those midshipmen interested in providing accurate responses would have probably taken the survey administration seriously, there is the potential that other midshipmen might have not been serious in their responses. Likewise, midshipmen with negative views or experiences may have not taken the MAS for several reasons, such as a lack of interest in administration sponsored activities, due to a concern that their responses might not be entirely confidential, or because they were no longer attending the Naval Academy.

For the comparison of civilian and military samples, this study uses the senior year MtF data collected in April of 2002 and the incoming midshipmen data collected in July 2003. While the MtF data collected by the SRC in April of 2003 is a direct comparison of the incoming cohort of midshipmen, that data will not be publicly available until Fall 2004. Comparing two different high school graduation years presents the potential for cohort effects attendant with some historical or cultural event or experience. While there are several very significant events that have occurred in recent years (September 11<sup>th</sup> 2001, the war in Afghanistan in Fall 2001, and the invasion of Iraq in Spring 2003) this research assumes that the present youth cohort is shaped by events beginning on September 11<sup>th</sup> and continuing through the commencement of the war in Iraq in April 2003 when the most recent MtF administration occurred. As a result, dramatic difference in the orientations of youth in the graduating high school classes of 2002 and 2003 are not expected. This may, however, be a source of response bias in the data and future research utilizing a direct comparison of academic cohorts is recommended.

Finally, comparing the extensively tested and validated MtF data, collected in high school classrooms by researchers from the Survey Research Center, to the data collected

by the administration at the Naval Academy using multiple untested modes may result in method bias that makes a direct military-civilian comparison less than ideal. There is, however, substantial research on youth orientations using the MtF dataset and the outcomes, comparisons, and trends found in this accompanying research will be validated against prior findings. Likewise, to minimize such concerns, tests of reliability for the different MAS modes and administrations have been conducted and described in the sections that follow.

The MtF dataset was subdivided into four comparative categories to assess differences in civilian and military attitudes and values. These categories are based upon the college and military service plans of the high school senior respondents to the MtF.<sup>25</sup> Categories were selected to provide the most similar and dissimilar groups to midshipmen at the Naval Academy in terms of college and military plans, while providing enough respondents for statistical comparison. The first group (N=5376) includes MtF respondents who said they “definitely will attend college” and “definitely won’t serve in the armed forces” following high school. This group, the “College” peers, shares the educational, but not the military plans of midshipmen. The second group (N=738) includes MtF respondents who said they “definitely won’t attend college” and “definitely won’t serve in the armed forces” after high school and are termed the “Neither” peer group. This group is most dissimilar from midshipmen in both educational and occupational plans. The third group (N=532) has the most similar educational and

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<sup>25</sup> While the overall percentage of individuals indicating intentions to serve in the military has decreased over time, propensity to enlist in the military and attitudes about the military as a workplace continue to be good predictors of ultimate recruitment (Bachman et al. 2000b; Bachman et al. 1998; National Research Council 2003; Segal et al. 1999). Recent research shows that seventy percent of male seniors with the strongest intentions to join the military and only six percent of those with the weakest intentions to join actually do so in the six years following high school (National Research Council 2003; Segal et al. 1999).



occupational plans to midshipmen and this group is termed “College/MIL.” In this category, MtF respondents indicated they “definitely will attend college” and “probably or definitely will serve in the armed forces.” The final group (N=365) includes high school seniors who indicated they “probably or definitely won’t attend college” and “probably or definitely will serve in the armed forces.” This group of respondents share the military, but not the educational, plans of midshipmen and may be similar to people planning to enlist in the military following high school. This group is called the “MIL Only” peer group. Omitted from the four civilian comparison groups are those respondents who express less certain college and/or military plans. However, these individuals are included in the analysis in the group of all respondents to the MtF called “All Civilian”. Table 5.3 provides the cross tabulation of MtF respondents on plans for college and service in the armed forces.

**Table 5.3 Plans For College and Service in the Armed Forces, MtF Respondents**

		Plans for Service in the Armed Forces				Total
		Definitely Won't	Probably Won't	Probably Will	Definitely Will	
Plans for College Attendance	Definitely Won't	738	122	66	96	1022
	Probably Won't	600	273	128	75	1076
	Probably Will	1591	631	277	141	2640
	Definitely Will	5376	1189	296	236	7097
Total		8305	2215	767	548	11835

<sup>a.</sup> N = 13544 (Missing = 1709 12.6%)

The military respondents to the MAS are also divided into comparison groups and, along with the civilian groups, are included in Table 5.4. The first military group labeled “Plebe” includes only incoming midshipmen in the Class of 2007. The tests of midshipmen and civilian differences are conducted on this base comparison group. The

following four military comparison groups correspond to the four academic cohorts in residence at the Naval Academy in April 2003 that responded to wave 1 of the MAS.

**Table 5.4 MtF and MAS Comparison Groups**

MtF and MAS Comparison Groups	Group Name (Academic Cohort) <sup>a</sup>	N
Total MtF Sample	All Civilian (2002)	13544
Def. Will Do College & Def. Won't Do Armed Forces	College	5376
Def. Won't Do College & Def. Won't Do Armed Forces	Neither	738
Def. Will Do College & Prob./Def. Will Do Armed Forces	College/MIL	532
Prob./Def. Won't Do College & Prob./Def. Will Do Armed Forces	MIL Only	365
Incoming Midshipmen/Beginning Plebe Year	Plebe (2007)	203
Ending Plebe Year/Beginning Third Class Year	Third Class (2006)	325
Ending Third Class Year/Beginning Second Class Year	Second Class (2005)	319
Ending Second Class Year/Beginning First Class year	First Class (2004)	317
Ending First Class year	Graduating Seniors (2003)	266
Total Naval Academy Sample from Brigade of Midshipmen	USNA	1430

<sup>a</sup> Parentheses after the group name indicate the academic year, or cohort, of graduation from HS (MtF) or College (USNA).

The names given to the first three of these groups correspond to the structural position of each group in September 2003 at wave 2 of the MAS. The fourth group is named “Graduating Seniors” because these midshipmen were within one month of graduation and commissioning as officers when they responded to wave 1 of the MAS. The final military group is the total Naval Academy sample, called “USNA”. In the results section that follows, groups are referred to by both the group name and by the academic cohort to which they were assigned.

While midshipmen are assumed to be more homogeneous a group than their civilian high school peers, there is diversity among midshipmen as well as the potential for distinct group and cohort differences given the dramatic occurrences of September 11,

2001 and subsequent military operations in Afghanistan and in Iraq. Midshipmen in the Classes of 2003, 2004, and 2005 entered the Naval Academy in the three years before 9-11-01 and may have based a decision to attend on a variety of reasons, but nonetheless in a relatively peaceful period of time. Thereafter, the midshipmen who entered the Academy (Classes of 2006 and 2007) had their decisions to embark on a path to military service directly affected by world events and may differ from other midshipmen as a result. However, midshipmen in the Classes of 2004 and 2005 had the opportunity to leave the Academy after 9-11-01 but before assuming a military service obligation. Instead of observing an increase in attrition for these two classes they had lower attrition rates than the Class of 2003 as of September 2003 (Office of Institutional Research 2003). The events of 9-11-01 may have influenced the choices of midshipmen to attend the Academy, but it does not appear to have resulted in a substantially negative effect on the plans of midshipmen to remain and serve.

### **Instrumentation and Materials**

This research involves the secondary analysis of civilian and military data collected from surveys that address a variety of social and personal issues. The civilian comparison group questions are drawn from all six forms of the annual MtF survey of high school seniors. Each form of the MtF questionnaire includes a series of common core questions, including parental educational attainment, maternal work status, high school academic track, self-assessed grade point average, and religious and political beliefs. The MAS includes questions from the MtF, demographic and background data derived from the Naval Academy data file, and two locally constructed items designed to assess role identity salience adapted from Woodruff (2003).

For both the MtF and the MAS, master data files are retained by the institutions (Civilian MtF: University of Michigan, Survey Research Center; Military MAS: U.S. Naval Academy, Office of Institutional Research) and data analysis has been conducted on individually sanitized files downloaded by this author. To ensure the ability to replicate results after the research is completed, the author has retained working data files.

### **Data Analysis and Presentation**

The results of quantitative data analysis that follow are presented in five chapters. Data analysis was conducted using SPSS version 10.0. This chapter provides descriptive statistics for several independent and control measures included in both the civilian and military samples. These measures include respondent gender, race, parental educational attainment, mother's work experience, political, and religious attitudes. A comparison of the distributions of military and civilian samples determined the validity of undertaking the most basic research questions concerning self-selection to the academy and the socialization process occurring there.

Upon completion of the descriptive introduction to the data, several scales and variables were constructed to evaluate the dependent variable orientations expressed by civilian and military samples. The orientations include the valued characteristics or rewards in a job (job values), work beliefs, and a series of attitudinal measures concerning the military. In addition, a dependent measure of military role identity salience was constructed from a forced choice scale of youth role identities. For the different modes and administrations of the MAS instrument, reliability analysis was conducted to assess the internal consistency and usefulness of the various scaled dependent measures.

The remaining chapters address the four research questions in order, using descriptive and multivariate statistical analysis including cross tabulations, means comparisons, multiple correlation, analysis of variance, cluster analysis, and regression analysis (OLS and logistic regression). Considering the variety and number of comparisons and tests to be conducted, the risk of committing a Type I error (rejecting the null hypothesis when it is not false) is increased. To minimize this risk the analysis and conclusions about the population in question (USNA midshipmen) will be formulated from the entirety of the results not from any one particular set of comparisons. Chapter 6 addresses the differences in orientations expressed by civilian high school seniors and newly arrived Fourth Class midshipmen, or Plebes. The MtF April 2002 data are compared to the Plebe (2007) group from the MAS to determine the nature and extent of differences in job values, work beliefs, and attitudes about the military in order to highlight self-selection and anticipatory socialization effects in the samples.

Chapter 7 explores whether or not a socialization effect is observable in midshipmen orientations by investigating the influence of prior socialization agents on the orientations of newly arrived midshipmen and by comparing the orientations of different cohorts of midshipmen based on the length of time they have been in the organization. Although only part of the MAS dataset is longitudinal, the data collection covers several different points in the progression from Plebe to Graduating Senior, from the beginning of plebe summer (within one week of arriving at the academy) to the end of First Class year (within one month of graduation). Assessing the patterns of change, or differences in orientations across different points in the process provides a very basic picture of socialization and change at the Academy.

Chapter 8 addresses whether or not different socialization tactics or forms of indoctrination and training experienced by Plebes and other midshipmen influence their orientations and result in higher identification, or salience, of a military role identity. This question utilizes the longitudinal component of the MAS dataset to compare change in job values, work beliefs, and role identity salience occurring during the period of initial or follow-on summer training for midshipmen and after the assumption of new positions in the organization and the assimilation of new roles in the Brigade of Midshipmen.

Chapter 9 investigates the fourth research question concerning the relationship between the orientations and role identities of midshipmen and their role related behaviors, occupational plans, and preferences, or the outcomes of the socialization process at the Naval Academy. Using regression analysis, the orientation measures were treated as independent variables that predict midshipmen outcomes. Regression models were constructed that assess the impact of job values, work beliefs, and role identity on various outcome measures such as military and academic performance grades, upperclass leadership positions, plans, preferences, and expected satisfaction of future work. In addition, the models assessed the impact of gender and race on midshipman outcomes.

## **Variables**

A listing of the variables included in this study as well as a description of construct scales and associated reliabilities are provided below.

### Dependent Variables

**Job Values (Job Rewards).** To test the differences in the job values of civilian and military groups, six scales were constructed from a series of 23 items used to assess

different rewards or characteristics associated with work. The 23 items listed below are in response to the following question:

“Different people may look for different things in their work. Below is a list of some of these things. Please read each one, then indicate how important this thing is for you.” The ordinal responses were – (1) not important, (2) somewhat important, (3) quite important, (4) extremely important.

- A job where you can see the results of what you do
- A job that has high status and prestige
- A job which is interesting to do
- A job where the chances for advancement and promotion are good
- A job that gives you an opportunity to be directly helpful to others
- A job which provides you with a chance to earn a good deal of money
- A job where you have the chance to be creative
- A job where the skills you learn will not go out of date
- A job that gives you a chance to make friends
- A job which uses your skills and abilities – lets you do the things you can do best
- A job that is worthwhile to society
- A job where you have more than two weeks vacation
- A job where you get a chance to participate in decision making
- A job which leaves a lot of time for other things in your life
- A job which allows you to establish roots in a community and not have to move from place to place
- A job which leaves you mostly free of supervision by others
- A job that offers a reasonably predictable, secure future
- A job where you can learn new things, learn new skills
- A job where you do not have to pretend to be a type of person that you are not
- A job that most people look up to and respect
- A job that permits contact with a lot of people
- A job with an easy pace that lets you work slowly
- A job where most problems are quite difficult and challenging

The job values measures used to construct the scales and components come from one form of the MtF instrument and from wave 1 and wave 2 of the MAS. Previous research on youth job values identified four to seven different value orientations that typically emerge from the list of 23 job rewards (Herzog 1982; Johnson and Elder 2002; Johnson 2001; Marini et al. 1996). For the present study six of the job value constructs are considered. They are: *extrinsic*, or the instrumental aspects of a job; *influence*, or

decision-making, challenge, and difficulty of a job; *intrinsic*, or the internal and personal appeal of a job; *leisure*, or the freedom associated with a job; *security*, or the stability of work, and finally *social / altruistic* rewards, or the opportunity to interact with others and contribute to society in a worthwhile manner (Johnson and Elder 2002). In other research, social and altruistic job values have been studied separately; however, initial data reduction analysis suggests that they be combined as one construct. The procedure that generated these constructs is described below.

To assess the viability of reducing the 23 job rewards into the previously used seven theoretical job values, a Principal Components Analysis (PCA) with varimax rotation was conducted on the entire set of military (MAS wave 1) and civilian respondents (MtF 2002). The rotated matrix for extracted components with Eigen values greater than 1.0 was identical to the theoretical constructs in previous research, with the following exceptions. The two items associated with *security*, a job that offers a reasonably predictable, secure future and a job that does not require moving, failed to emerge as a separate construct, loading highest on the *extrinsic* and *leisure* components, respectively. In addition, the items associated with social and altruistic job values loaded strongly on one construct, rather than two. Similar results were obtained using Maximum Likelihood Estimation (MLE), a technique that attempts to find potential underlying population parameters associated with variable correlations in a sample (Hair, Anderson, Tatham, and Black 1998). In addition, when the job rewards associated with *security* were removed from the analysis, both PCA and MLE produced the same five constructs again, indicating the stability of such measures in this sample.



Instead of using factor scores obtained from PCA, however, summated four point scales were constructed utilizing the items that loaded strongest on each of the five components (including the combined social/altruistic scale). The use of scales rather than factor scores allowed the inclusion of a security scale, constructed from the two items normally associated with this measure. While losing some of the explanatory variance that different items contribute to the component factor scores, the distinctness of constructed scale means generally provide an adequate measure of group differences (Hair et al. 1998) and have been utilized below.<sup>26</sup> Scale outputs were standardized by dividing the scale total by the number of items in each scale and are provided in Table 5.5. Standardization of these scales allows relative comparison between groups and across job values.

The highest rated scale is intrinsic job values with a grand mean of 3.33, while the lowest rated scale is leisure job values at 2.73. The highest rated single item is a job that is interesting (mean = 3.77, SD = .51) and the lowest rated single item is a job that has an easy pace and lets you work slowly (mean = 2.19, SD = .95). Previous research has shown these same two items (interesting work and an easy pace) at the top and bottom of youth job value preferences (Bachman, Freedman-Doan, and O'Malley 2000b).

For the job value scales with at least four items, the standardized scale reliabilities all exceed .70 and indicate a satisfactory level of consistency with the variables in those scales. For the two item security and influence scales, the reliabilities do not reach the level of .60 normally acceptable in exploratory research (Hair et al. 1998). This is partly a function of the number of scale items, but also due to the lower correlation between

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<sup>26</sup> The same statistical outcomes were obtained for tests of independence conducted on PCA factor scores and on standardized scale scores for the five constructs (extrinsic, influence, intrinsic, leisure, social/altruistic) when the two security items were removed from the analysis.

individual items. Likewise, the two items included in the influence scale comprised the weakest composite construct in the PCA and the security items failed to load on a unique construct. That combined with the lower scale reliabilities initially suggests interpreting results related to these two scales with caution.

**Table 5.5 Job Values Scales Means and Reliabilities, USNA Midshipmen and Civilians**

Scale	Item	Wave 1 Mean <sup>a</sup> (SD)	Wave 1 Standardized Alpha (N)	Wave 1-2 Standardized Alpha (N)
Extrinsic Values		3.08	.76 (3575)	.82 (954)
	High Status & Prestige	2.72 (.93)		
	Chances for Advancement are Good	3.34 (.76)		
	Chance to Earn a Good Deal of \$	3.11 (.90)		
	Most People Look up to and Respect	3.16 (.85)		
Influence Values		2.80	.52 (3587)	.71 (954)
	Chance to Participate in Decision Making	3.15 (.79)		
	Most Problems are Difficult & Challenging	2.45 (.90)		
Intrinsic Values		3.33	.73 (3565)	.66 (949)
	Interesting to Do	3.77 (.51)		
	Uses Your Skills and Abilities	3.54 (.64)		
	See the Results of What You Do	3.33 (.69)		
	Skills You Learn Won't Go Out of Date	3.07 (.90)		
	Learn New Skills, Learn New Things	3.18 (.76)		
	Be Yourself	3.46 (.84)		
	Chance to be Creative	2.99 (.89)		
Leisure		2.73	.71 (3577)	.79 (949)
	Time for Other Things in Your Life	3.21 (.79)		
	Leaves You Mostly Free of Supervision	2.69 (.94)		
	More Than Two Weeks Vacation	2.81 (.99)		
	Easy Pace That Lets You Work Slowly	2.19 (.95)		
Security		3.00	.54 (3598)	.72 (950)
	Reasonably Predictable, Secure Future	2.75 (.79)		
	Establish Roots and Not Have to Move	3.26 (1.0)		
Social / Altruistic		3.07	.72 (3573)	.77 (949)
	Chance to Make Friends	3.09 (.85)		
	Permits Contact With a Lot of People	2.86 (.93)		
	Opportunity to be Directly Helpful to Others	3.18 (.83)		
	Worthwhile to Society	3.14 (.84)		

<sup>a</sup>Four point scale range from 1 – 4, where 1 was “not important” and 4 was “extremely important”.

To evaluate the convergent validity of the job values scales, a reliability analysis of respondents on both wave 1 and wave 2 scales in the MAS was conducted (Hair et al. 1998). In every case but one (intrinsic job values), the standardized alpha level increased,

indicating that the different measures of the same job values constructs are well correlated and satisfactorily representative among midshipmen from wave 1 to wave 2. Thus, the low scale reliabilities observed in the overall sample in wave 1 are perhaps due to varying interpretations by midshipmen and their civilian high school peers and the use of these scales is considered reliable.

**Work Beliefs.** To assess differences in midshipmen and civilian high school senior beliefs about work, a PCA with varimax-rotated solution of four items measuring work orientations was conducted, extracting components with Eigen values greater than 1 from the responses to the question below.

“In the following list you will find some statements about leisure time and work. Please show whether you agree or disagree with each statement.”

The ordinal responses were – (1) disagree, (2) mostly disagree, (3) neither, (4) mostly agree, (5) agree.

- I like the kind of work you can forget about after the workday is over
- To me, work is nothing more than making a living
- I expect my work to be a very central part of my life
- I want to do my best in my job, even if this sometimes means working overtime

PCA of the total MtF and MAS sample (N = 3645) resulted in two orthogonal components, one dealing with personal involvement in work (work you can forget and working only to make a living), and the other related to the centrality of work. When similar PCA techniques were conducted using only the Naval Academy sample at waves 1 and 2, only one component emerged each time, reflecting a continuum that measures the meaning and importance or centrality of work, ranging from unimportant to very central and important.

To address this difference in component constructs, the four work belief items were summated and standardized in a single five-point scale. Two items were recoded to measure stronger work beliefs in a positive direction. The scale (range 1-5) and item

mean values and reliabilities are provided in Table 5.6. While the reliability of this scale at wave 1 is low (standardized alpha = .58), this method was preferred over other data management techniques because of the multiple group comparison design of this research.

**Table 5.6 Work Beliefs Scale Means and Reliabilities**

Scale	Item	Wave 1 Mean (SD)	Wave 1 Standardized Alpha (N)	Wave 1-2 Standardized Alpha (N)
Work Beliefs		3.54	.58 (3610)	.78 (943)
	I like the kind of work I can forget about (Recode)	2.69 (1.33)		
	Work is nothing more than making a living (Recode)	3.58 (1.32)		
	I expect work to be a central part of my life	3.64 (1.08)		
	I want to do the best in my job, even if it means working overtime	4.23 (0.89)		

As with job values scales, a reliability analysis of the work belief scales for midshipmen at wave 1 and wave 2 was conducted to assess the convergent validity of the indicators. The standardized alpha for wave 1 and wave 2 together was .78 and indicates a strong correlation between different administrations of the same measures and high convergent validity of the work beliefs construct for midshipmen.

**Military Attitudes.** To assess the differences in Plebe midshipmen and civilian high school senior attitudes about the military, several single item questions concerning military work, military policies, and social issues in the military were included. The first two items address attitudes about military work and includes a five-point summated and standardized scale created from the following items that assess the extent to which different opportunities are available to individuals in the military.

“To what extent do you think the following opportunities are available to people who work in the military services?”

The ordinal responses were – (1) to a very little extent, (2) to a little extent, (3) to some extent, (4) to a great extent, (5) to a very great extent.

- A chance to get ahead
- A chance to get more education
- A chance to advance to a more responsible position
- A chance to have a personally more fulfilling job
- A chance to get their ideas heard

Table 5.7 indicates that the items form a strong measure of military opportunity and the one item with a weaker contribution to the scale shares a high correlation ( $r > .42$ ) with other scale items. In addition to the military opportunity scale, the military work attitudes include a single item question below concerning the acceptability of the military as a workplace. Previous research demonstrates that attitudes about the military as a workplace are highly correlated with propensity to enlist in the military (National Research Council 2003).

“Apart from the particular kind of work you want to do, how would you rate each of the following settings as a place to work?”

The ordinal responses were – (1) not at all acceptable, (2) somewhat acceptable, (3) acceptable, (4) desirable.

- *The Military*

**Table 5.7 Military Opportunity Scale Means and Reliabilities**

Scale	Item	Wave1 Mean (SD)	Standardized Alpha	N
Military Opportunity Scale		3.55	.89	3151
	A chance to get ahead	3.54 (1.03)		
	A chance to get more education	3.82 (1.00)		
	A chance to advance to a more responsible position	3.90 (0.99)		
	A chance to have a personally more fulfilling job	3.64 (1.06)		
	A chance to get their ideas heard	2.86 (1.16)		

The other indicators of military attitudes are separated into two categories, attitudes about military policies, and attitudes about social issues in the military. The military policy attitudes are measured by respondents’ opinions about whether present military influence and spending levels are too high and by two questions that deal with

support for a military draft and the participation of women in a military draft. A higher mean score on each item indicates either greater support for the policy or attitudes that are closer to current military policy.

“Do you think the U.S. spends too much or too little on the armed forces?”

The ordinal responses were – (1) far too much, (2) too much (3) about right, (4) too little, (5) far too little.

“All things considered, do you think the armed services presently have too much or too little influence on the way this country is run?”

The ordinal responses were – (1) far too much, (2) too much (3) about right, (4) too little, (5) far too little.

“Do you favor or oppose a military draft at the present time?”

The ordinal responses were – (1) strongly favor, (2) mostly favor, (3) no opinion, or mixed, (4) mostly oppose, (5) strongly oppose.

“Do you think any military draft in the U.S. should include women as well as men?”

The ordinal responses were – (1) yes, (2) uncertain, (3) no.

Finally, three questions address attitudes about military social issues and include questions concerning obtaining justice when wrongly treated by a supervisor and the extent to which respondents believe discrimination against women and African Americans exists in the military. In each case, a higher mean score indicates a more positive view of social issues in the military, such as greater justice or less discrimination.

“To what extent is it likely that a person in the military can get things changed and set right if treated unjustly by a superior?”

The ordinal response categories were – (1) to a very little extent, (2) to a little extent, (3) to some extent, (4) to a great extent, (5) to a very great extent

“To what extent do you think there is any discrimination against women who are in the armed services?”

The ordinal response categories were – (1) to a very great extent, (2) to a great extent, (3) to some extent, (4) to a little extent, (5) to a very little extent.

“To what extent do you think there is any discrimination against African American people who are in the armed services?”

The ordinal response categories were – (1) to a very great extent, (2) to a great extent, (3) to some extent, (4) to a little extent, (5) to a very little extent.

**USNA/Military Identity.** Role identity was assessed by a measure adapted from Woodruff (2003) that asks respondents to list in order the three most important descriptions of who they are. The respondents selected the three most important identities from a list of 19 items and there were two blanks for respondents to list identities. Four role identities were considered “military role identities” for their relationship to the military, the Naval Academy, or the process of leadership development. The military role identities were: (1) sailor, soldier, airman, marine, (2) midshipman, (3) leader, and (4) future military officer. The complete listing of role identities is provided below.

“Describe who you are, meaning how you define or identify yourself. Think of it as if you were meeting someone for the first time, and they know nothing about you. Using the list below, select the three most important identities. Place a “1” next to the role that is the most important in describing who you are, a “2” next to the next most important role and so on until you have selected three identities. There are two lines that you may use to write in an identity that is not listed.”

The categorical responses were:

- (1) Friend
- (2) Son or daughter
- (3) Worker
- (4) Athlete
- (5) Student
- (6) Brother or sister
- (7) *Sailor, Soldier, Airman, Marine*
- (8) Intellectual
- (9) Musician or Artist
- (10) Girlfriend or boyfriend
- (11) *Midshipman*
- (12) Racial or ethnic group member (Latino, Asian, etc.)
- (13) Outdoorsman (Hiker, rock climber, fisherman, etc.)
- (14) Christian, Jew, Muslim, or member of a religion
- (15) *Leder*
- (16) Single/unattached
- (17) *Future military officer*
- (18) Recreation participant (golfer, runner, swimmer, etc.)
- (19) American or another nationality
- (20) Write in missing role \_\_\_\_\_
- (21) Write in missing role \_\_\_\_\_

The hypothesized midshipman/military identity salience measure was modified after initial analyses revealed that the four military roles represented potentially four different identities rather than a global military identity. The first of these measures is the leader identity. The Naval Academy highlights the role it plays in preparing individuals for service as leaders and provides training, education, and practical experience to all midshipmen in leadership. The second measure is the midshipman identity. The midshipman role is the focus of all activity at the Naval Academy. The academy exists for the primary or manifest reason to train and educate midshipmen. The individuals attending the academy are immersed in midshipman/Naval Academy culture from “Induction Day” to graduation and commissioning. The third identity is service identity and expresses more of a social identity, or group categorization (e.g., Soldier, Sailor, Airman, Marine), than a specific role identity. In addition, since the terminology of the service identity is associated with the enlisted military work role, it typically does not appear in the culture or vernacular of Academy life. The final identity is the officer identity. This identity is associated with a future occupational and professional role and the ultimate outcome of an Academy education. The four separate identity salience measures were constructed by assigning a value of 3 if the identity was listed first, 2 if the identity was listed second, 1 if the identity was listed third, and a value of 0 if the identity was not listed by the respondent.

**Midshipman Leadership Positions.** For midshipmen in the Classes of 2004 and 2005 a continuous measure was constructed from leadership positions held within the Brigade of Midshipmen during the Spring semester 2003, Fall semester 2004, and Spring semester 2004. Typically, First Class midshipmen fill positions of leadership in the



organization during each academic term. There are leadership positions filled by Second Class midshipmen, although they are fewer and not as influential in the organizational hierarchy. For each position a midshipman held during a semester a point value was assigned according to the following ranks:

- Captain – 7.0
- Commander – 6.0
- Lieutenant Commander – 5.0
- Lieutenant – 4.0
- Lieutenant Junior Grade – 3.0
- Ensign – 1.0
- Midshipman in Ranks – 0.0
- Sergeant Major – 4.0
- First Sergeant – 3.0
- Sergeant – 2.0
- 2/c Admin Officer – 1.0
- Second Class with no rank – 0.0

The total score for all three semesters is the leadership scale measure. The higher the leadership scale score, the more a midshipman has participated in the leadership hierarchy of the Brigade of Midshipmen or the more influential the position held. By their seniority in the organizational structure and the number of leadership positions available to them, First Class midshipmen will have greater opportunity to participate in leadership roles. The mean leadership score for MAS respondents from the Class of 2004 is 4.01 and the range is 0 – 13. For the Class of 2005, the mean leadership score is 1.10 and the range is 0 – 6.

**Military Performance Grades (Military Quality Performance Rating – MQPR).** A measure of professional aptitude of a midshipman as reported by the active duty officer and enlisted leadership of a midshipman Company as of January 2004. It is based on supervisor and peer ratings of each midshipman and is a cumulative continuous scale measure with a range of 0.00 to 4.00.

**Academic Performance Grades (Academic Quality Performance Rating – AQPR).** A measure of academic grade point average as of January 2004. It is a cumulative continuous scale measure with a range of 0.00 to 4.00.

**Occupational Plans at Age 30.** A forced choice listing of possible occupations that a person might hold at the age of 30. The variable is constructed as a dichotomous response to the selection of “military service” as the occupation at age 30. Those individuals selecting military are coded 1 and others are coded as 0. The possible occupational choices are listed below.

“What kind of work do you think you will be doing when you are 30 years old?”

The categorical responses were –

- (1) Laborer (car washer, sanitary worker, farm laborer)
- (2) Service worker (cook, waiter, barber, janitor, gas station attendant, practical nurse, beautician)
- (3) Operative or semi-skilled worker (garage worker, taxi-cab, bus or truck driver, assembly line worker, welder)
- (4) Sales clerk in a retail store or by phone (phone sales, department store clerk, drug store clerk)
- (5) Clerical or office worker (bank teller, bookkeeper, secretary, postal clerk or carrier, keyboard operator)
- (6) Protective service (police officer, firefighter, detective)
- (7) *Military service*
- (8) Craftsman or skilled worker (carpenter, electrician, brick layer, mechanic, machinist, tool and die maker, telephone installer)
- (9) Farm owner, farm manager
- (10) Owner of small business (restaurant owner, shop owner)
- (11) Sales representative (insurance agent, real estate broker, bond salesman)
- (12) Manager or administrator (office manager, sales manager, school administrator, government official)
- (13) Professional without doctoral degree (registered nurse, librarian, engineer, architect, social worker)
- (14) Professional with doctoral degree or equivalent (lawyer, physician, dentist, scientist, college professor)
- (15) Full-time homemaker
- (16) Don't Know.

**Expected Job Satisfaction.** For those midshipmen selecting “military” as the work they think they will be doing at age 30, the expected satisfaction with military work is assessed by the following question.

“How satisfying do you think this kind of work will be for you?”

The ordinal responses were – (1) not very satisfying, (2) somewhat satisfying, (3) quite satisfying, (4) very satisfying, (5) extremely satisfying.

**Military Career Plans.** For all midshipmen, the following question assesses the certainty midshipmen have in their long-term military career expectations. The more certain midshipmen are that they will have a career in the military, the higher the variable score.

“Do you expect to have a career in the Armed Forces?”

The ordinal responses were – (1) no, (2) uncertain, (3) yes.

#### Independent and Control Variables

**Life Goals.** A series of questions are used to understand the importance of various activities and achievements in the respondent’s life. One particular item is used in the MAS to determine the importance of military service to individual respondents.

“How important is each of the following to you in your life?”

The ordinal responses were – (1) not important, (2) somewhat important, (3) quite important, (4) extremely important.

*-Serving in the military*

**Academic Comparison Group.** Comparison groups described in Table 5.4.

All Civilian (2002)  
College  
Neither  
College/MIL  
MIL Only  
Plebe (2007)  
Third Class (2006)  
Second Class (2005)  
First Class (2004)  
Graduating Seniors (2003)  
USNA

### **Input Characteristics:**

**Highest Total SAT.** A continuous scale variable that measures the official admissions SAT score having a range of 0 to 1400.

**Parental Education.** “What is the highest level of schooling your father/mother completed?”

The ordinal responses were – (1) grade school or less, (2) some high school, (3) high school, (4) some college, (5) college, (6) graduate or professional school, (7) don’t know or does not apply (recoded as 0 for don’t know or does not apply and treated as missing).

**Mother’s Work Experience.** “Did your mother have a paid job (half time or more) during the time you were growing up?”

The ordinal responses were – (1) no; (2) yes, some of the time when I was growing up; (3) yes, most of the time; (4) yes, all or nearly all of the time.

**Minority Group.** The categorical responses were – (0) Caucasian, (1)

Racial/ethnic minority category.

**Gender.** The categorical responses were – (0) male, (1) female.

**Prior Socialization and Information.** These variables measure the extent of experiences and exposure to information about the organization and its values prior to entry.

**Prior Military Service.** A variable used to measure whether a midshipman has had prior military service. The categorical responses were – (0) no, (1) yes.

**USNA Graduate Parent.** A variable used to measure whether the parent of a midshipman was a graduate of the Naval Academy. The categorical responses were – (0) no, (1) yes.

**Military Parent.** A variable used to measure whether one or two parents of the midshipmen served in the active, reserve or guard forces of the military. The categorical responses were – (0) no, (1) yes, one parent (2) yes, both parents.

**USNA Prep School or Feeder Source.** Attendance at either the Naval Academy Prep School in Newport, RI or one of several Naval Academy Foundation-funded

private preparatory schools for one year. The categorical responses were – (0) no, (1) yes.

**USNA Summer Seminar Indoctrination.** Attendance at the one-week training program held at the Naval Academy each summer. Students are provided with college level lectures and basic military instruction from midshipmen leaders. The categorical responses were – (0) no, (1) yes.

**Naval Academy Environment.** While individual subjective measures of the environment are not included in this study, the following measures capture part of the academic, extra-curricular, and informal cultural influences in the lives of midshipmen.

**Varsity Athlete Leader** – A measure of involvement with a varsity athletic team. The categorical responses were – (0) no, (1) varsity team, (2) varsity letter winner.

**Academic Major Group** – The academic major program at the Naval Academy is centered on engineering, science and technology and all midshipmen receive a Bachelor of Science Degree at graduation. This variable measures how close midshipmen are to the core academic program at the Academy. The categorical responses were – (0) undeclared, (1) non-technical/engineering major, (2) engineering/science and technical major

**Company/Peer Group** – A measure of the mean group response based on the formal living arrangements of midshipmen. There are 30 different companies in the Brigade of Midshipmen. These midshipmen live together as a cohort along with midshipmen from the other three academic year groups over the course of four years. In this sample, the Plebe groups were reassigned as a group to different companies at the completion of plebe year and remained in that company thereafter. The categorical responses were –  
1-30

**Structural Position in the Organization / Service Obligation Level**  
(Underclass/Upperclass) – Second and First Class midshipmen (upperclass) have a formal obligation to military service, whereas underclass midshipmen do not. Upperclass midshipmen fill the leadership roles in the Company and Brigade organizations.  
The categorical responses were –

- (1) Underclass / no service obligation / no leadership role
- (2) Upperclass / service obligation / leadership role

## **Descriptive Analysis and Introduction to the Results**

The contents of this section and the four chapters that follow present the results of statistical testing and analysis of the study's research questions. In the present section, important characteristics of the sample are described and characteristics of comparison sub-groups are presented in order to understand better potential effects of organizational socialization at the Navy Academy. After completing introductory descriptive and comparative data for the study sample, the following chapters present the results of Research Questions 1 through 4. Throughout the results sections, a level of  $p \leq .05$  is utilized to report statistical significance of results.

The Monitoring the Future Study (MtF) and Midshipman Attitude Survey (MAS) provide not only measures assessing the values, attitudes, and preferences of youth regarding college, work, and the military, but also important demographic and social structural information. The following tables report measures of interest to this study. The distributions of the MtF and MAS by gender and racial/ethnic category are provided in Table 5.8. In MtF, the distribution of males and females is nearly equal. The MtF, however, includes more than seven percent missing data in gender distribution. In the MAS, as in the Brigade of Midshipmen overall, the percentage of males is considerably greater than females at more than four to one. The percentage of female respondents in the MAS (18.2%), however, is greater than the overall distribution of women in the Brigade of Midshipmen (15.7%), which, in turn, is slightly greater than the distribution of women officers in the Department of the Navy (14.9%) (Statistical Information Analysis Division 2004).

**Table 5.8 Gender Distribution, MtF and MAS by Academic Class**

	MtF		MAS (USNA)				Total MAS
	2002	2007	2006	2005	2004	2003	
Male	44.5	83.7	82.8	80.6	85.8	75.9	81.8
Female	48.4	16.3	17.2	19.4	14.2	24.1	18.2
Missing	7.1	-	-	-	-	-	-
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
N	13544	203	325	319	317	266	1430

In the publicly available MtF data, distribution by race and ethnicity is limited to Caucasian and African American respondents, while the distribution of the MAS includes the categories of Asian American, Hispanic, and Native American (see Table 5.9). The percentage of Caucasian respondents in the MAS is nearly twenty points higher than in the MtF and the percentage of African Americans in the MAS is less than half that category of respondents in the MtF. In the MAS, African Americans comprise 4.8 percent of the respondents, while all minority racial and ethnic groups combined is 20.4 percent. For this reason, comparative distributions of civilian and military samples do not include minority comparisons, while military to military comparisons, in most analyses, categorize all minority respondents together.

**Table 5.9 Race/Ethnicity Distribution, MtF and MAS by Academic Class**

	MtF		MAS (USNA)				Total MAS
	2002	2007	2006	2005	2004	2003	
Caucasian	61.4	75.9	78.8	79.0	82.0	81.2	79.6
African American	11.0	7.4	3.1	5.0	4.1	5.6	4.8
Asian American	-	3.9	6.2	5.3	6.0	3.4	5.1
Hispanic	-	10.3	9.2	9.1	6.9	9.4	8.9
Native American	-	2.5	2.8	1.6	0.9	0.4	1.6
Missing / Other	27.4	-	-	-	-	-	-
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Minority	-	24.1%	21.2%	21.0%	18.0%	18.8%	20.4%
N	13544	203	325	319	317	266	1430

Tables 5.10 to 5.14 provide comparison group distributions on parental educational attainment, mother's work experience, the importance of religion, and political beliefs. These data provide a backdrop to the differences that will be investigated between civilian MtF groups and the military sample.

**Table 5.10 Father's Education Level, USNA Midshipmen vs. Civilian Samples**

		Comparison Group Percentage <sup>a</sup>					
		College	Neither	College/MIL	MIL Only	Plebe	USNA
Father's Education Level	Grade School	2.1	7.5	3.8	5.7	0.0	0.5
	Some High School	5.7	19.3	11.3	19.6	2.5	2.1
	High School	24.7	43.5	22.1	35.8	14.0	9.8
	Grad	18.8	11.3	20.7	20.9	12.0	17.5
	Some College	27.0	12.0	26.6	14.9	34.5	30.9
	College Grad	21.7	6.4	15.5	3.2	37.0	39.2
	Grad School						
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		5096	657	497	316	203	1399

a. Missing/Don't Know: College: 5.2%; Neither: 10.9%; College/MIL: 6.6%; MIL Only: 13.4%; Plebe: 0%; USNA: 2.2%

For those MtF respondents planning on college (College and College/MIL groups), approximately 67% indicated their father had at least attended college, while only 29% of those without plans for college or the military had fathers who attended college and 39% of those who indicated plans to enter the military after high school had fathers with college experience. In the USNA sample, of which the Plebe group is a part, fathers have much higher educational attainment than other groups, with nearly 88% having at least attended college.

The general patterns of maternal educational attainment are similar to those of paternal education. For college bound civilians who do not plan on military service, 70% of their mothers have at least some college experience, while 62% of the college bound who plan on military service have mothers with college experience. For the non-college



bound, 40% of those not planning military service and 50 % of those planning on serving have mothers with at least some college experience. The military sample also has the most highly educated mothers with more than 86% having at least some college experience.

**Table 5.11 Mother's Education Level, USNA Midshipmen vs. Civilian Samples**

		Comparison Group Percentage <sup>a</sup>					
		College	Neither	College/MIL	MIL Only	Plebe	USNA
Mother's Education Level	Grade School	1.9	6.4	3.6	6.1	0.0	1.0
	Some High School	4.2	15.3	9.6	13.1	2.5	1.3
	High School Grad	23.0	36.7	25.3	30.2	10.0	11.2
	Some College	24.1	19.1	23.5	24.1	19.9	19.9
	College Grad	29.4	16.6	24.7	20.1	44.8	39.6
	Grad School	17.3	6.0	13.3	6.4	22.9	27.0
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		5231	687	502	328	203	1408

<sup>a</sup>. Missing/Don't Know: College: 2.7%; Neither: 6.9%; College/MIL: 5.6%; MIL Only: 10.1%; Plebe: 0%; USNA: 1.5%

The pattern for mother's work experience is different from that observed in parental educational attainment. For each of the MtF comparison groups, mothers who worked either most or all of the time when the respondent was young comprised approximately 66% of the sample, while in the military sample only 56% of mothers worked most or all of the time when the respondent was young. While the education level of the mothers of midshipmen is higher than other groups, given the data it is impossible to determine whether the early work experiences of these mothers was by choice or necessity.

**Table 5.12 Mother's Work Experience, USNA Midshipmen vs. Civilian Samples**

		Comparison Group Percentage <sup>a</sup>					
		College	Neither	College/MIL	MIL Only	Plebe	USNA
Mother Paid Job When R Was Young	None of the Time	15.5	16.0	15.3	12.3	20.8	19.8
	Some of the Time	18.9	17.7	18.9	21.7	22.8	25.1
	Most of the Time	15.5	22.1	20.3	23.1	15.3	16.6
	All of the Time	50.1	44.2	45.5	42.9	41.1	38.4
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		5333	729	528	359	203	1413

<sup>a</sup>. Missing/Don't Know: College: 0.8%; Neither: 1.2%; College/MIL: 0.8%; MIL Only: 1.6%; Plebe: 0%; USNA: 1.2%

Religiosity of respondents runs along college lines with approximately 66% of both categories of college bound civilians indicating that religion was either pretty or very important in their life, while 63% of the military sample reported this same level of religiosity. For those respondents not planning to attend college, approximately 46% reported religion was either pretty or very important to them. Of note, however, is the high civilian non-response rate for this item, which may skew the results in the direction of religiosity.

**Table 5.13 Importance of Religion, USNA Midshipmen vs. Civilian Samples**

		Comparison Group Percentage <sup>a</sup>					
		College	Neither	College/MIL	MIL Only	Plebe	USNA
Importance of Religion in R's Life	Not Important	11.5	25.1	15.3	23.2	11.4	14.6
	A Little Important	21.7	27.6	20.1	30.7	22.3	22.5
	Pretty Important	31.8	23.6	28.7	25.7	24.8	28.2
	Very Important	35.1	23.7	35.9	20.4	41.6	34.8
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		4447	590	418	280	203	1415

<sup>a</sup>. Missing: College: 17.2%; Neither: 20.0%; College/MIL: 21.4%; MIL Only: 23.2%; Plebe: 0%; USNA: 1.0%

Table 5.14 presents information suggesting that political beliefs of many high school seniors are not yet formed. The percentage of those without political beliefs range from a low of 30% for those most similar to the military sample to a high of 53% for those most unlike the military sample. Clearly, a greater percentage of youth planning to attend college have formed political beliefs. The percentage of USNA respondents with formed political beliefs is considerably higher than any of the civilian categories, even for those incoming midshipmen who have recently left their civilian high school counterparts.

**Table 5.14 Political Beliefs, USNA Midshipmen vs. Civilian Samples**

		Comparison Group Percentage <sup>a</sup>					
		College	Neither	College/MIL	MIL Only	Plebe	USNA
R's Political Beliefs	Very Conservative	3.1	4.6	5.1	6.2	9.5	7.9
	Conservative	11.6	5.9	13.3	9.9	34.3	39.1
	Moderate	25.6	16.5	28.1	20.3	31.3	33.0
	Liberal	18.3	10.4	17.7	10.1	10.0	8.4
	Very Liberal	5.7	3.5	3.2	2.5	2.0	1.8
	Radical	2.0	5.9	2.1	5.4	0.0	.6
	None/Do Not Know	33.7	53.3	30.4	45.6	12.4	9.2
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N		5316	732	526	355	203	1411

<sup>a</sup>. Missing/Don't Know: College: 1.1%; Neither: 2.0%; College/MIL: 1.1%; AF: 2.7%; Plebe: 0%; USNA: 1.3%

Of those civilian high school respondents with formed political beliefs, moderate beliefs predominate across all groups and range from 16 to 28 percent, with liberal beliefs following next in each comparison group. For the military sample not only do most midshipmen express political beliefs, the distribution of beliefs is largely conservative (39%) and the percentage of midshipmen holding moderate beliefs (33%) is greater than any of the civilian categories. While this sample of midshipmen is more conservative in

their political beliefs, it is not a unitary distribution of beliefs and mirrors the relative conservatism of the military organization and is similar to trends identified in research comparing incoming enlisted members of the armed forces to civilian peers (Segal et al. 2001). This chapter has introduced the data and sample and the following chapters address, in order, the specific research hypotheses of the study.

## Chapter 6 Civilian and Military Values, Beliefs, and Attitudes

Research question one investigates the differences in the job values, work beliefs, and military attitudes expressed by the sample of incoming midshipmen and civilian comparison groups. It was hypothesized that because of individual self-selection, anticipatory socialization and organizational selection effects, incoming midshipmen would prefer influence job values more than civilian peers, work would be more central to them, and they would express more pro-military attitudes than civilian peer groups.

Using items from the MtF and MAS, a series of single item measures and constructed scale means were tested for independence to determine whether the orientations of a sample of incoming midshipmen were different from various groups of civilian high school peers. For each of the group comparisons, a positive difference indicates a higher Plebe group mean while a negative difference indicates the mean for civilian peers was higher. Statistically significant differences are marked.<sup>27</sup> The overall MtF sample mean is included in each analysis to provide a baseline for the civilian comparison groups. The total number of respondents for individual MtF items fluctuates as a result of differing response rates for questions, but also because survey items are located on one or more of six different MtF questionnaire forms.<sup>28</sup>

A comparison of overall military and civilian orientations is presented first, followed by a comparison of military and civilian groups of women on the same measures. Due to the small number of African Americans in the sample of incoming midshipmen and the inability to group African American respondents to the MtF into

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<sup>27</sup> Statistically significant results are marked as follows: \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

<sup>28</sup> For the statistical analyses in this study, missing data was treated using the all-available approach (PAIRWISE option in SPSS). Results using the complete case approach (LISTWISE option in SPSS) were consistent with the all-available data approach, but reduced the sample sizes by 10 to 15 percent.

meaningful categories, the analysis of minority differences in military and civilian orientations is not possible and that section of the first research question is not addressed in the analysis.

### Job Values

In Table 6.1, the incoming cohort of midshipmen, or the Plebe group, is compared to groups of civilian high school peers on the six job values scales. Each job values scale is considered in the order in which it appears. Statistical and substantive differences and patterns or trends that emerge in the groups are highlighted.

In the first comparison, the Plebe group is assessed against the other groups on extrinsic job values. The Plebe group mean is lowest of any group and lies just below the range of “pretty important”. The observed mean differences between Plebes and each of the civilian comparison groups are statistically significant and the largest group difference exists between Plebes and the College/MIL group. Surprisingly, these two groups share the most similar college and work plans, but appear not to share views on the tangible rewards of a job.

In the second comparison, the mean influence values of the Plebe group are tested against the mean for each of the civilian groups. The Plebe group rated influence job values higher than any other group and each of these group differences were statistically significant. The largest group differences were observed between the Plebes and the Neither group, the most dissimilar from Plebes on college and work plans, while the smallest group difference was observed between the Plebes and the College/MIL group, those most similar to them. It appears that the characteristics of work as a military officer

and preference for a job that is both challenging and difficult may be related to the college and military career plans of youth.

**Table 6.1 Comparison of Job Values, USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Extrinsic Job Values	Plebe	199	2.97	0.64	
	All Civilian	2169	3.24	0.61	-0.27***
	College	902	3.22	0.61	-0.25***
	Neither	130	3.22	0.67	-0.25**
	College/MIL	99	3.41	0.62	-0.44***
	MIL Only	51	3.24	0.63	-0.27**
Influence Job Values	Plebe	200	3.11	0.59	
	All Civilian	2179	2.67	0.71	0.44***
	College	905	2.70	0.70	0.41***
	Neither	129	2.47	0.77	0.65***
	College/MIL	96	2.86	0.71	0.25**
	MIL Only	53	2.65	0.76	0.46***
Intrinsic Job Values	Plebe	199	3.40	0.34	
	All Civilian	2160	3.38	0.46	0.02
	College	903	3.42	0.44	-0.02
	Neither	128	3.35	0.57	0.05
	College/MIL	98	3.45	0.46	-0.05
	MIL Only	52	3.37	0.48	0.03
Leisure Job Values	Plebe	201	2.52	0.64	
	All Civilian	2175	2.84	0.66	-0.32***
	College	906	2.80	0.66	-0.28***
	Neither	126	2.91	0.65	-0.39***
	College/MIL	100	2.76	0.75	-0.24**
	MIL Only	53	2.79	0.62	-0.27**
Security Job Values	Plebe	201	2.57	0.66	
	All Civilian	2188	3.22	0.70	-0.65***
	College	908	3.25	0.70	-0.69***
	Neither	130	3.28	0.72	-0.72***
	College/MIL	100	3.07	0.68	-0.51***
	MIL Only	53	3.05	0.86	-0.49***
Social Altruism Job Values	Plebe	201	3.25	0.57	
	All Civilian	2161	3.07	0.66	0.18***
	College	901	3.16	0.65	0.09*
	Neither	128	2.90	0.75	0.35***
	College/MIL	99	3.15	0.64	0.10
	MIL Only	51	2.84	0.76	0.41**

<sup>a</sup>. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The next comparison in Table 6.1 is between the Plebe group and civilian groups on intrinsic job values. In this assessment, none of the observed group differences is significant. Each of the comparison groups rated intrinsic job values higher than any of

the other job values scales, which is consistent with previous youth job values research (Johnson and Elder 2002). In these data, as in previous research (Johnson 2001), intrinsic job rewards vary the least and are the most valued characteristics of work in youth transitioning to adulthood.

In the comparison of Plebes to civilian groups on leisure job values, the Plebe mean again is significantly different from all other groups. Overall, civilian groups rate the leisure aspects of work low, but not as low as influence job values. The Plebe group, however, rated leisure rewards lowest of all the job values scales. The Plebes differ the most on this scale from the Neither group, those sharing neither college nor career plans with midshipmen. From these data, it appears that incoming midshipmen may either value the leisure aspects of work less and self-select as a group to the Naval Academy or they recognize that the challenges and difficulty of the academy and military work leave little time for leisure and, thus, engage in anticipatory socialization to this environment.

For the security job values scale, the difference of means for Plebes and all other civilian groups are statistically significant. In this case, the Plebe group is lowest, the Neither group is highest, and the mean Plebe rating lies between the “a little important” and “pretty important” range. While all of the civilian groups differ from the Plebe group, there appears to be a “military effect” in the civilian groups. The civilians with plans for military service value the security rewards of work less than those without plans for the military which may reflect their recognition that military life involves change.

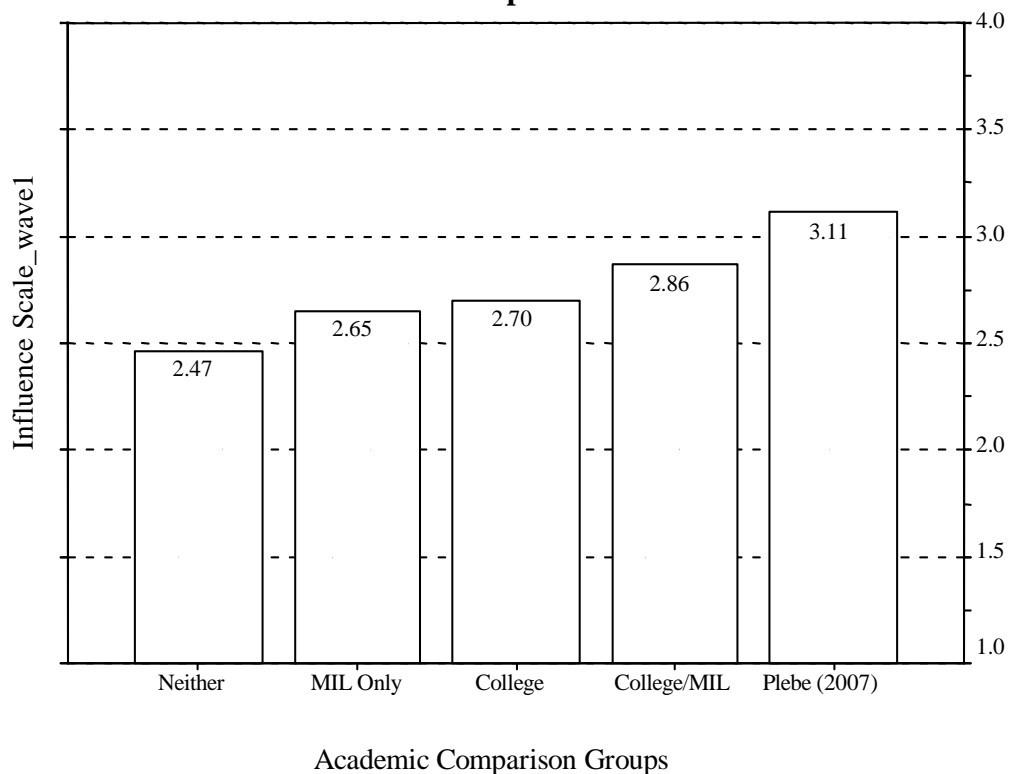
The last set of comparisons in Table 6.1 involves the social altruism rewards of work and shows the Plebe group expressing the highest group mean of all. In this case, there are statistically significant differences between the Plebe group and the Neither MIL



Only, and College groups. However, there is no difference between Plebes and the College/MIL, the group most like the incoming midshipmen. The pattern of differences between these groups suggests a college effect, where the college bound value the social and altruism characteristics of work more than other youth, regardless of preferences for military service.

Figure 6.1 addresses the specific hypothesis that incoming midshipmen value the influence characteristics of work more than their civilian peer groups. In this figure, the orientations of civilian peers become more like the Plebes the closer they are in their college and work plans, but the Plebes value influence job values higher than all others.

**Figure 6.1 Mean Influence Job Values at Wave 1, USNA Plebes and Civilian Samples**



In Levene's test for equality of variance, the null hypothesis of equal population variances is rejected for influence, intrinsic, and social altruism job values. This is a

result of the negative skew and smaller dispersion of Plebes on each measure. In addition, for influence and social altruism job values the Plebe sample differs significantly from civilian peers. For the job values scales where equal variance is assumed, the dispersion of responses for the Plebe sample also is less than civilians for leisure and security job values. Thus, while differences in job values scales remain statistically significant between Plebes and all civilians, similar conclusions regarding the group variances can not be made.

The data presented in this section show that the sample of incoming midshipmen place less value on the extrinsic, leisure, and security characteristics of work and value the influence and social altruism aspects of a job more than the peer comparison groups (although the difference from the college bound, military peers is not statistically significant for social altruism job values). Other patterns or trends in the data are the higher preferences for security job values exhibited by those without plans for military service and the lower group means for social altruism job values in those not planning to attend college. The observed standard deviation for the Plebe group is least for influence, intrinsic, security, and social altruism job values indicating little group variation on those scales for incoming midshipmen, but the assumption of equal population variances are only met for three of the six job values scales.

### Work Beliefs

In this section, the work beliefs of the Plebe group or the importance and centrality of work are compared to the four different civilian peer groups. Statistical differences and patterns or trends that emerge in the groups are highlighted. Considering that a two-component PCA solution was observed in the overall sample, work belief comparisons

between the Plebes and civilian peer groups using a single scale are conducted with caution.<sup>29</sup> Work beliefs scale scores are utilized in this analysis, however, to maintain a consistent approach to the data and to provide a clear method of comparing civilian-to-military and military-to-military group differences and relative strengths on work beliefs.

In Table 6.2, the mean work beliefs of the Plebe group are compared to each of the civilian high school peer groups and to the overall civilian high school sample. In each case, the work beliefs of midshipmen are higher than the civilian high school peers and each difference is statistically significant. The Plebe group “mostly agrees” that work is central and important to them, while the other groups are between the “neither agree nor disagree” and “mostly agree” scale range. Levene’s test for homogeneity of population variance showed that the Plebe sample differed significantly from all civilian peer groups. As with job values scales, this difference is likely a result of the negative skew in midshipmen work beliefs. Considering the violation of this assumption, the Plebe group still holds significantly stronger work beliefs than their peers and the group means vary the least.

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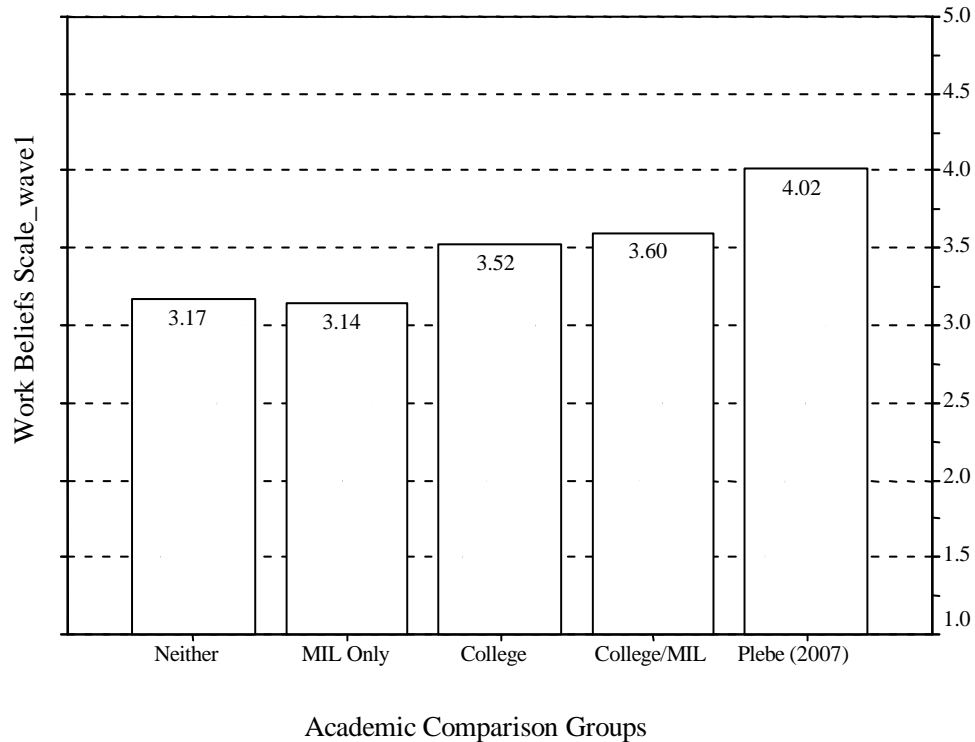
<sup>29</sup> In a concurrent test of independence for work belief component factor scores using the two-component solution described in the methods section (personal involvement in work and centrality of work), results approximated those presented in Table 6.2 for each comparison group, but provided a richer description of the differences. In each comparison, midshipmen believed they would be more personally involved in work and work would be more central to them and, in each case, the differences were statistically significant, except for differences in centrality for the two groups planning on military service (College/MIL & MIL Only). In this case, midshipmen scores were higher on both component factors, but the differences were not statistically significant. In Table 6.2, the greatest mean differences are observed between midshipmen and groups not planning on college. This corresponds to sizeable differences observed in these two groups for the PCA work involvement component (Neither group: mean difference = -1.06,  $p < .001$  and MIL Only group: mean difference = -1.19,  $p < .001$ ). The work beliefs scale utilized in this test may mean slightly different things for different groups, but the overall differences between Plebes and their civilian peers still exist.

**Table 6.2 Comparison of Work Beliefs, USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Work Beliefs	Plebe	201	4.02	0.62	
	All Civilian	2211	3.38	0.79	0.64***
	College	877	3.52	0.78	0.49***
	Neither	114	3.17	0.79	0.85***
	College/MIL	86	3.60	0.87	0.42***
	MIL Only	55	3.14	0.82	0.88***

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The differences in mean work beliefs between Plebes and the two groups planning to attend college are smaller than the differences between Plebes and those without plans for college. The smallest observed group difference is between Plebes and those civilian peers with college and military plans most like midshipmen (College/MIL group). In Figure 6.2, the work beliefs of civilian peers without college plans are least and those with plans to attend college are most similar to, but statistically different from the Plebe group.

**Figure 6.2 Mean Work Beliefs at Wave 1, USNA Plebes and Civilian Samples**

The data presented in this section and highlighted in the Table 6.2 and Figure 6.2 show that the mean work beliefs of the Plebe group are higher, vary less, and are significantly different from civilian peers. In addition, plans to attend college appear to share a relationship with higher overall work beliefs in youth transitioning to adulthood. In effect, Plebes who have begun their college careers are more idealistic about work than civilian peers who are still anticipating the transition to college.

### Military Attitudes

In Tables 6.3 – 6.5, the Plebe group is compared to groups of civilian high school peers on three sets of questions related to attitudes about the military. The first set assesses attitudes about military work, the second set attitudes about military policy and civil-military relations, and the third set measures attitudes about social justice issues in the military. In each case, statistical and substantive differences and patterns or trends that emerge in the groups are highlighted and higher mean scores for items indicate pro-military attitudes.

In Table 6.3, attitudes about military work are assessed through the military opportunity scale and the acceptability of the military as a workplace. Higher mean scores on each of these questions indicate the most positive views of military work. The observed differences in the military opportunity scale group means between Plebes and civilian peers without plans for military service (College and Neither groups) are statistically significant. The two civilian groups with plans for military service (College and Neither groups) believe that opportunities are available “to a great extent” in the military, while the mean for the Plebe group is just below the level of “to a great extent”.

This pattern of similarity between Plebes and youth with plans for military service is highlighted in Figure 6.3.

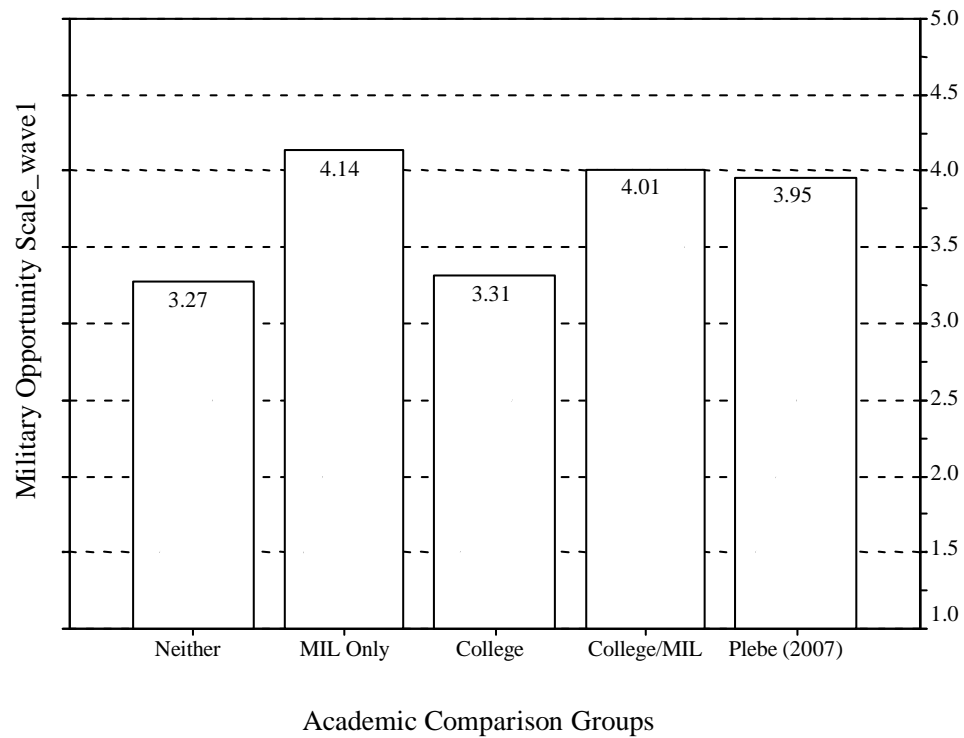
**Table 6.3 Comparison of Military Work Attitudes, USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Opportunity Scale	Plebe	198	3.96	0.59	
	All Civilian	1755	3.41	0.98	0.54***
	College	793	3.31	0.95	0.65***
	Neither	108	3.27	1.21	0.69***
	College/MIL	84	4.01	0.89	-0.05
	MIL Only	47	4.14	0.90	-0.18
Military as a Place to Work	Plebe	200	3.71	0.53	
	All Civilian	2221	1.95	1.00	1.75***
	College	913	1.60	0.78	2.10***
	Neither	117	1.54	0.85	2.17***
	College/MIL	88	3.41	0.81	0.30**
	MIL Only	82	3.37	0.82	0.34**

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The Plebe group attitudes about the military as a workplace are statistically higher and more favorable than all other groups. The civilian peer groups with plans for military service (College/MIL and MIL Only groups) also rate the military as an acceptable workplace and again highlight an apparent military self-selection effect demonstrated in Figures 6.3 and 6.4. The mean ratings for groups without plans for military service (College and Neither) are least favorable and fall between the range of “acceptable and “not at all acceptable”.

**Figure 6.3 Mean Scores for Military Opportunity Scale at Wave 1, USNA Plebes and Civilian Samples**



In addition, on both of these military work questions, the standard deviation of Plebe group mean attitudes vary less than any of the civilian groups, highlighting the uniformity of the orientations of youth who have entered the military organization. As in other group comparisons, the Levene's test for equality of population variance indicates that the dispersion of Plebes differs significantly from civilian peers on the comparison of attitudes about the military as a workplace and for views about military opportunity. These results again confirm that the Plebe group is significantly different from civilian peers in both mean attitudes and the variance of those attitudes from civilian peers.

**Figure 6.4 Mean Attitudes for The Military as a Place to Work at Wave 1, USNA Plebes and Civilian Samples**

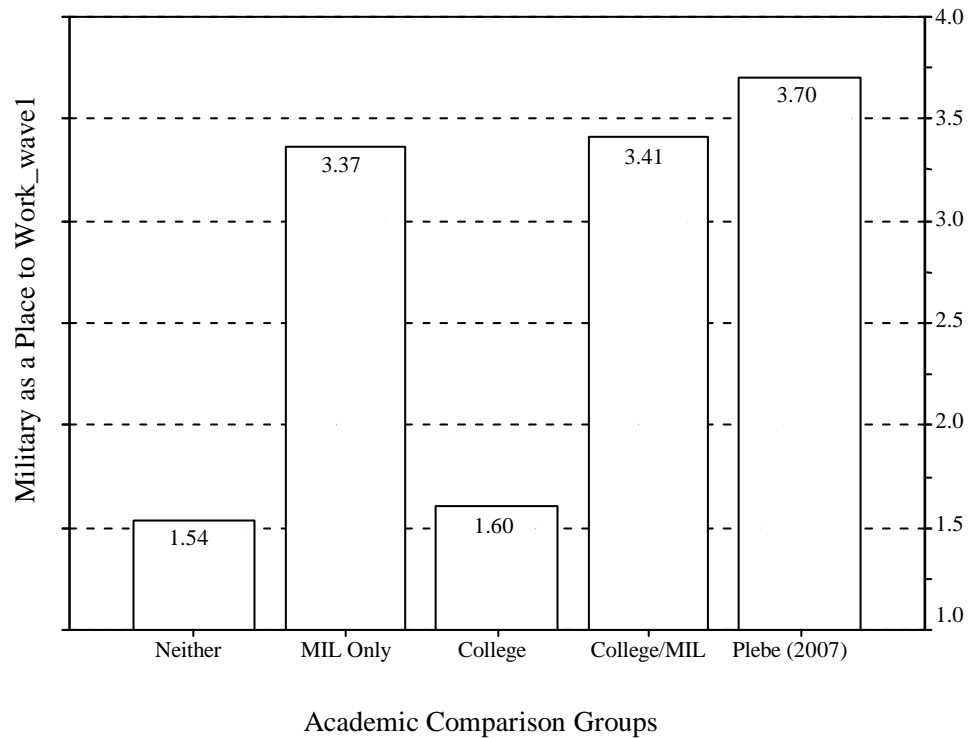


Table 6.4 presents the comparison of Plebe and civilian peer group attitudes on military policy issues. For each of the questions in this table, higher mean scores indicate greater support for the indicated policy or attitudes that correspond to current military policy. For attitudes about the level of military spending, the Plebe group mean is highest and corresponds to the most pro-military view military spending. The differences in group means between Plebes and civilian peers without plans for military service (College and Neither groups) are statistically significant. These non-military groups, however, are not unsupportive of the military and believe military spending is in the range of “about right”.

Attitudes about the extent of military influence in the way the country is run follow a similar pattern to military spending attitudes. The Plebe group and civilian peers



with military plans (College/MIL and MIL Only groups) do not differ statistically and express pro-military attitudes that military influence is slightly less than “about right”. Civilian peer groups without military plans (College and Neither groups) differ statistically from the military groups and believe that military influence is “about right”.

**Table 6.4 Comparison of Military Policy Attitudes, USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Spending	Plebe	200	3.45	0.71	
	All Civilian	2158	3.01	0.82	0.44***
	College	856	2.92	0.82	0.53***
	Neither	115	3.05	0.80	0.40***
	College/MIL	87	3.31	1.00	0.14
	MIL Only	56	3.30	0.91	0.15
Military Influence	Plebe	200	3.22	0.54	
	All Civilian	2156	3.02	0.67	0.20***
	College	854	2.97	0.64	0.25***
	Neither	115	2.97	0.81	0.25**
	College/MIL	87	3.26	0.80	-0.04
	MIL Only	56	3.34	0.69	-0.12
Military Draft	Plebe	199	2.54	1.17	
	All Civilian	1802	2.46	1.11	0.08
	College	765	2.28	1.02	0.26**
	Neither	102	2.25	1.07	0.29*
	College/MIL	79	2.96	1.29	-0.42**
	MIL Only	52	2.88	1.44	-0.35
Military Draft Include Women	Plebe	200	2.12	0.90	
	All Civilian	1858	2.08	0.82	0.04
	College	774	2.01	0.82	0.10
	Neither	108	2.09	0.84	0.03
	College/MIL	81	2.25	0.86	-0.13
	MIL Only	55	2.29	0.83	-0.18

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The remaining two military policy issues in Table 6.4 present comparisons of group differences on a military draft. The most pro-military attitudes regarding the draft would be those that support the current All Volunteer Force and not the resumption of conscription. In the first comparison, civilian peer groups without plans for military service (College and Neither groups) express more support for a military draft than do military groups and differ significantly from the Plebe group. The civilian peer groups

with plans for military service express less support for a military draft than the Plebe group, but the difference is only statistically significant between the Plebe group and the College/MIL group. The mean attitudes of all comparison groups on the inclusion of women in a military draft do not differ statistically and are in the range of “undecided”. The military groups (Plebe, College/MIL, MIL Only), however, express less support relative to the non-military groups (College, Neither) for such a policy. The Plebe group responses reflect lower variance than the civilian groups on military spending and influence, but not on questions about the military draft.

Table 6.5 presents the results of group comparisons for attitudes about three military social issues: whether individuals can remedy injustice by superiors in the military and the extent to which there is discrimination against women and African Americans in the military. On each of the three questions, a higher mean score indicates a more favorable or pro-military attitude. For the first question, a higher score indicates greater belief in the condition that justice can be found and for the last 2 questions that less discrimination exists.

In Table 6.5, the mean attitudes for the Plebe group are most favorable on the question of military justice. The Plebes differ statistically from both groups without plans for military service (College and Neither groups) and, along with the College/MIL and MIL Only groups, believe that “to some extent” a person in the military can get things set right if treated unjustly. The difference of means is greatest between Plebes and the College peer group, while the smallest difference is observed between Plebes and the College/MIL group.

**Table 6.5 Comparison of Military Social Attitudes, USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Justice	Plebe	199	3.38	1.06	
	All Civilian	1760	2.68	1.11	0.70***
	College	792	2.56	1.09	0.82***
	Neither	109	2.76	1.29	0.62***
	College/MIL	83	3.11	1.04	0.27*
	MIL Only	48	3.04	1.09	0.34*
Military Discrimination: Women	Plebe	199	3.53	0.95	
	All Civilian	1759	3.04	1.12	0.49***
	College	793	2.96	1.10	0.58***
	Neither	109	3.28	1.32	0.25
	College/MIL	83	3.25	1.19	0.28*
	MIL Only	48	3.65	1.16	-0.11
Military Discrimination: AF-AM	Plebe	200	4.43	0.72	
	All Civilian	1758	3.53	1.14	0.90***
	College	792	3.50	1.10	0.93***
	Neither	109	3.41	1.36	1.02***
	College/MIL	84	3.52	1.20	0.91***
	MIL Only	48	4.12	1.08	0.31

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

For attitudes on gender discrimination, the Plebe group differs statistically from the College and College/MIL groups and, on average, thinks that discrimination against women in the armed forces is between “to a little extent” and “to some extent”. The MIL Only group does not significantly differ from Plebes on gender discrimination attitudes. For attitudes about discrimination against African Americans, the Plebe group, expressed the most favorable views and, on average they believe that discrimination exists between “to a very little extent” and “to some extent”. The Plebe group differs significantly on this issue from all other peer groups, except for the MIL Only group, who share some of the most similar and pro-military views to the Plebe group on the issues in Table 6.5. On the military social issues, the standard deviation of the Plebe group is least on questions of discrimination against women and African Americans, but not on the question of military justice.

The preceding tables highlight a pattern of attitude differences showing greater support for and more positive views of the military by Plebes and civilian peers with plans for military service (College/MIL and MIL Only groups). Incoming midshipmen hold more positive views of the military as a workplace and express higher opinions of opportunities available in the military in comparison to civilian high school seniors without plans for military service (College and Neither groups). Only on attitudes about a military draft and the inclusion of women in a draft do Plebes and their non-military peers share somewhat similar views. Otherwise, an apparent military self-selection effect with civilian military peer groups (College/MIL and MIL Only) is observed across nearly all of the military attitude questions.

In Figures 6.3 and 6.4, the group means for military work attitudes graphically portray the extent of this self-selection effect and highlight the potential of individual attitudes in predicting behavior related to the organization. In other words, pro-military attitudes have been linked to propensity to enlist in the armed forces in previous research (Bachman, Segal, Freedman-Doan, and O'Malley 1998) and a similar pattern is observed here for youth planning on serving in the officer corps of the military and those who have entered a program of officer training. The following section addresses differences in the job values, work beliefs, and military attitudes of women respondents to the MtF and MAS.

#### Gender Differences in Military and Civilian Orientations

The tables that follow highlight differences in job values, work beliefs, and military attitudes for incoming women midshipmen and for groups of women high school seniors. Comparisons are provided for each of the previously identified groups except for

the group of civilian respondents without plans for college, but planning on military service (MIL Only) because the number of respondents in that category was too small.

In Table 6.6, the differences between women Plebes and civilian peer groups on job values scales are presented. As in the larger samples in Table 6.1, women Plebes rate extrinsic job values lower than other peer groups and the difference between the Plebe group and the group most similar to them (College/MIL) is greatest. None of the observed differences on mean extrinsic job values are statistically significant, however. This lack of statistical significance can be partly explained by the smaller sample size, but the actual differences are smaller than those in the combined groups of men and women.

As in the overall group comparison, women Plebes favor influence job values more than each of the comparison groups. In this instance, statistically significant differences are present for the two groups without plans for military service (College and Neither groups). As in the overall group comparisons, intrinsic job values are rated highest by each group of women except for the Neither group who rate security job values highest. Women Plebes are not significantly different from women high school peers in their ratings of the intrinsic characteristics of work. As in the overall sample, female youth place a tremendous amount of value in the intrinsic rewards of a job.

For leisure job values, the group rating for women Plebes is lower than for other peer groups and lower than the overall Plebe group rating in Table 6.1. Similar to the larger sample comparisons, the difference in leisure job values between the Plebe group and the College/MIL group is smaller than other groups. For women Plebes and groups without plans for military service (College and Neither groups), mean differences in the value of leisure characteristics of work are statistically significant. The women Plebes

also value the security characteristics of work significantly less than peer groups of women. The women Plebes differ the least from the peer group sharing the most similar college and military plans, although the difference is statistically significant in this instance.

**Table 6.6 Comparison of Job Values, Women USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Extrinsic Job Values	Plebe	32	3.02	0.63	
	All Civilian	1092	3.22	0.60	-0.20
	College	578	3.20	0.62	-0.18
	Neither	55	3.20	0.59	-0.18
	College/MIL	35	3.32	0.68	-0.30
Influence Job Values	Plebe	33	3.08	0.60	
	All Civilian	1092	2.65	0.68	0.43***
	College	579	2.68	0.67	0.40**
	Neither	54	2.44	0.68	0.64***
	College/MIL	33	2.91	0.78	0.17
Intrinsic Job Values	Plebe	33	3.36	0.34	
	All Civilian	1084	3.45	0.41	-0.08
	College	579	3.45	0.40	-0.09
	Neither	54	3.38	0.46	-0.02
	College/MIL	34	3.47	0.48	-0.11
Leisure Job Values	Plebe	33	2.38	0.70	
	All Civilian	1092	2.76	0.67	-0.38***
	College	582	2.74	0.66	-0.36**
	Neither	53	2.81	0.59	-0.43**
	College/MIL	35	2.58	0.82	-0.20
Security Job Values	Plebe	33	2.41	0.69	
	All Civilian	1097	3.26	0.69	-0.85***
	College	582	3.25	0.69	-0.84***
	Neither	55	3.40	0.65	-0.99***
	College/MIL	35	2.91	0.66	-0.50**
Social Altruism Job Values	Plebe	33	3.24	0.54	
	All Civilian	1089	3.20	0.60	0.04
	College	579	3.25	0.59	-0.01
	Neither	55	3.09	0.64	0.15
	College/MIL	35	3.25	0.57	-0.01

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In the last set of comparisons, the social altruism job values of women Plebes do not differ significantly from any other peer group. In fact, the mean score of Plebes on

the social altruism scale is nearly identical to that of the larger Plebe comparison group and to those women with plans for college (College and College/MIL groups). While it appears plans for college and social altruism job values share a positive relationship, the relationship between gender and social altruism appears to hold for all female groups. In sum, the effects of self-selection to the military seem to hold for groups of women with plans for military service, but the effects of gender are also observed in youth preferences for the extrinsic, intrinsic, and social altruism characteristics of work.

In Table 6.7, the work beliefs of incoming women midshipmen are compared to different civilian peer groups. The work beliefs of women Plebes are higher than each of the women high school comparison groups. In comparisons with peer groups of women, the work beliefs of Plebes are statistically higher than the groups without plans for military service (College and Neither groups). The group that does not differ significantly on work beliefs from women Plebes is the group that shares plans for military service with them (College/MIL group). Similar to the pattern observed in Table 6.2, groups with plans for college have higher mean work beliefs than other groups, although no group holds work beliefs as high as incoming midshipmen (men or women).

**Table 6.7 Comparison of Work Beliefs, Women USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Work Beliefs	Plebe	33	4.08	0.65	
	All Civilian	1087	3.47	0.76	0.61***
	College	552	3.61	0.74	0.47***
	Neither	54	3.29	0.82	0.79***
	College/MIL	39	3.76	0.89	0.32

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Tables 6.8 – 6.10, the attitudes of incoming women midshipmen and civilian peers are compared on military work, policy, and social issues. The Plebe group rates

opportunity in the military higher than any peer group. However, the only statistically significant difference is that between Plebes and the College group. The Plebe group differs least from the College/MIL in their views of military opportunity.

For attitudes about the military as a place to work (Table 6.8), the women Plebe group expresses the most acceptable rating of military work while the two groups without plans for military service (College and Neither) rate military work as least acceptable. The differences between the women Plebes all other groups are statistically significant and the group that shares the most similar plans to the Plebe group (College/MIL group) exhibits the smallest difference in military work place preferences.

**Table 6.8 Comparison of Military Work Attitudes, Women USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Opportunity Scale	Plebe	32	4.07	0.65	
	All Civilian	905	3.51	0.91	0.56***
	College	507	3.44	0.89	0.63***
	Neither	45	3.72	0.99	0.35
	College/MIL	28	3.94	0.72	0.13
Military as a Place to Work	Plebe	33	3.76	0.44	
	All Civilian	1078	1.83	0.94	1.92***
	College	549	1.63	0.81	2.13***
	Neither	65	1.57	0.90	2.19***
	College/MIL	23	3.26	0.81	0.50*

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 6.9, the military policy attitudes of women are compared. For both military spending and military influence questions, the Plebe group mean rating is higher than for other groups, indicating support for greater military spending and influence. The only group that differs statistically from women Plebes on either measure is the College group who, on average, think that military spending is “about right”. On questions dealing with the draft, the women Plebe group holds the highest mean attitudes, indicating the least support for these policy issues, which are pro-military attitudes. Regarding



support for a military draft, the women Plebe group is statistically different from both groups not planning on serving in the military (College and Neither groups). The Plebe group differs significantly from the College group on the issue of including women in the draft and the College/MIL group differs the least from the Plebe group on both military draft questions.

**Table 6.9 Comparison of Military Policy Attitudes, Women USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Spending	Plebe	32	3.34	0.55	
	All Civilian	1059	2.95	0.74	0.39**
	College	535	2.90	0.74	0.44**
	Neither	53	3.17	0.75	0.17
	College/MIL	39	3.00	1.00	0.34
Military Influence	Plebe	32	3.19	0.47	
	All Civilian	1057	3.01	0.61	0.18
	College	533	2.98	0.61	0.21
	Neither	53	3.04	0.76	0.15
	College/MIL	39	3.03	0.67	0.16
Military Draft	Plebe	32	2.84	0.99	
	All Civilian	899	2.48	0.97	0.37*
	College	497	2.42	0.96	0.42*
	Neither	48	2.42	0.82	0.42*
	College/MIL	27	2.78	1.19	0.06
Military Draft Include Women	Plebe	32	2.31	0.86	
	All Civilian	916	1.90	0.78	0.41**
	College	504	1.85	0.79	0.46**
	Neither	48	1.98	0.76	0.33
	College/MIL	27	2.04	0.85	0.27

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 6.10, women are compared on questions dealing with military social issues. When questioned about obtaining justice against a supervisor in the military, the Plebe group again holds the highest group mean. The women Plebe group differs statistically only from the College group. Women Plebes, on average, see less discrimination against women in the military, but do not differ significantly from other groups. The lack of statistical significance between these two groups on this issue is likely influenced by the small sample size.

For the last social issue question regarding discrimination against African Americans, the women Plebe group holds the highest mean attitudes and, on average, thinks there is less discrimination in the military than comparison groups do. The women Plebes differ statistically from each of the other groups and again differs most from the group of women sharing the most similar college and military plans. The differences in military social attitudes between groups of women who share other orientations about the military, point to the possibility of anticipatory socialization in the orientations of women Plebes. By selecting and entering this organization, newcomers must address the problems in it and often express positive evaluations in order to eliminate dissonant cognitive distress.

**Table 6.10 Comparison of Military Social Attitudes, Women USNA Plebes vs. Civilian Samples**

	Comparison Group	N	Mean	Std. Deviation	Mean Difference <sup>a</sup>
Military Justice	Plebe	32	3.41	1.04	
	All Civilian	899	2.70	1.08	0.70***
	College	506	2.60	1.06	0.81***
	Neither	44	3.09	1.24	0.32
	College/MIL	26	3.12	0.95	0.29
Military Discrimination: Women	Plebe	32	2.81	3.19	
	All Civilian	897	3.12	2.88	0.31
	College	506	3.15	2.85	0.34
	Neither	44	3.05	2.95	0.24
	College/MIL	26	3.23	2.77	0.42
Military Discrimination: AF-AM	Plebe	32	1.69	4.31	
	All Civilian	894	2.65	3.35	0.96***
	College	504	2.63	3.37	0.94***
	Neither	44	2.75	3.25	1.06***
	College/MIL	27	3.04	2.96	1.35***

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The preceding tables show distinct and statistically significant differences between incoming women midshipmen and civilian high school peers on job values, work beliefs, and attitudes about the military. For attitudes about military work and the extent of

military spending and influence, the observed differences were smallest for the group that shares the most similar plans for college and military service as midshipmen (College/MIL group). These two groups, however, differ most on issues of gender and racial discrimination in the military. Unlike the comparison of Plebes and peer groups in the preceding sections, military self-selection effects appear to be influenced by gender and college effects as well. However, women Plebes do share patterns of support with the overall sample of Plebes for influence job values, the centrality of work, the opportunities available in the military, and the acceptability of the military work.

#### Summary of Results: Research Question One

The results presented in this section highlight the many distinct differences between newcomers to the Naval Academy and civilian high school seniors. Plebes differ from civilian peers in the value they place in job rewards. With the exception of extrinsic and intrinsic job values, Plebes express more idealistic work orientations than civilian peers. Newcomers to the Academy also express stronger work beliefs than civilian peers and feel that work will be very central and important to them. With few exceptions, the Plebe group also expresses the most pro-military and positive attitudes about military work, policies, and social issues. Distinct patterns are also observed when the orientations of women Plebes are compared to civilian peers, indicating the presence of an overall Naval Academy self-selection or anticipatory socialization effect, as well as self-selection effects for both military service plans and plans to attend college.

## **Chapter 7 Prior Experiences and Organizational Socialization**

This study's second research question considers the effects of prior socialization experiences and certain demographic and social structural factors on midshipmen job values, work beliefs, military attitudes, and military role identities. It was hypothesized that incoming midshipmen who are exposed to prior socialization agents, where accurate and realistic information about the organization and its values is provided, would exhibit a better organizational "fit". In other words, they would place higher value on influence job characteristics, work would be more central to them, they would express the most positive attitudes about the military, and midshipman role identity would be more salient to them and, as a result, they would express more certain military career plans at entry. In addition, it was hypothesized that, having been exposed to a greater number and variety of military training and work experiences, the job values and work beliefs of upperclass midshipmen would reflect greater realism (influence job values would be rated lower and work beliefs would be less central and important) than underclass midshipmen. In other words, the orientations of midshipmen are hypothesized to differ because of the differing socialization tactics, increasing diversity and scope of role models, and environmental influences for upperclass midshipmen (individual, informal, variable, random, and investiture) vs. those experienced by Plebes (group, formal, sequential, fixed, and divestiture).

Because of their contractual commitment to serve in the military, it was also hypothesized that upperclass midshipmen would express attitudes that are more positive and pro-military and military role identities would be more salient to them than for underclass midshipmen without this service obligation. Stage-based approaches to

organizational socialization predict that increased commitment to an organization, such as formal membership and obligation, results in more positive evaluations of the organization or group (Feldman 1981; Moreland and Levine 2001). Finally, it was hypothesized that women and minority midshipmen would express lower influence job values, work would be less central and important, and military role identities would be less salient, because of a perceived lack of organizational “fit” with the dominant organization culture. The results of these tests are highlighted in the sections that follow.

#### Prior Experiences, Demographics, and Social Structure

The variables that are included in the MAS that reflect prior experience with the Navy and its values are: prep school (attendance at any Navy-funded preparatory school); military service (any prior enlisted service in the Active, Reserve, or Guard forces); Summer Seminar attendee (Naval Academy summer program for prospective midshipmen); military parent (either one or two parents served in the military at some time); and USNA legacy (either parent attended the Naval Academy). The distributions for these variables by Naval Academy academic class are provided in Table 7.1 (Office of Institutional Research 2003).

The Naval Academy Preparatory School (NAPS) in Newport, RI and Naval Academy Foundation scholarships provide prospective midshipmen with an opportunity to spend one year at NAPS or at a private prep school preparing themselves academically for the rigors of a Naval Academy education (U.S. Naval Academy Office of Admissions 2004). From 1999-2003, between 20-25 % of each incoming class was comprised of individuals from a preparatory program. In addition, some midshipmen enter the Naval

Academy from active enlisted service (6-11% for classes entering from 1999-2003), bringing with them the experience of serving in Navy and Marine Corps units.

Each summer, the Naval Academy hosts one week Summer Seminar camps for academically inclined, rising high school seniors. The camps expose students to military routine, physical training, and college level academic programs in engineering, science, and technology and highlights the quality and rigor associated with a Naval Academy education (U.S. Naval Academy Office of Admissions 2004). Table 7.1 indicates that the percentage of midshipmen attending the Summer Seminar is increasing (up to 45% for the Class of 2007) and this experience may influence incoming midshipmen to a differing degree. The Admissions Office at the Naval Academy states that students interested in pursuing an appointment at one of the service academies should “seriously consider the Summer Seminar to determine if the Naval Academy will help them achieve their goals” and get a “jump start on the admissions process” (U.S. Naval Academy Office of Admissions 2004). For individuals self-selecting into the organization, the Summer Seminar may be seen as way to improve the odds of gaining admission.

Other obvious socialization influences come from the parents of midshipmen. While the number of midshipmen having at least one parent with some military experience is sizeable (38.0% overall), the level of influence may vary, due to the different conditions (i.e., status, duration, branch, occupation) of a parent’s military service. Lastly, having a Naval Academy graduate as a parent (on average 7% of an entering class) may prepare individuals for indoctrination to academy life and the organization’s values, but also provides prospective midshipmen with occupational knowledge of the Naval Officer career, since graduate parents would have served for

several years on active duty following graduation. There are other socialization experiences that prepare individuals for the Naval Academy, but the variables listed are tangible and measurable indicators of the level of exposure to Naval Academy organizational values and knowledge.

**Table 7.1 Prior Socialization Experiences, USNA Midshipmen**

		USNA Academic Class					Total % MAS
		2007	2006	2005	2004	2003	
	Percent						
Prep School	No	74.9	77.5	75.9	78.5	72.2	76.0
	Yes	25.1	22.5	24.1	21.5	27.8	24.0
Military Service	No	94.1	90.8	91.2	92.7	89.5	91.5
	Yes	5.9	9.2	8.8	7.3	10.5	8.5
Summer Seminar	No	54.7	56.9	59.9	64.7	67.7	61.0
	Yes	45.3	43.1	40.1	35.3	32.3	39.0
Military Parent	No	69.0	64.3	62.4	63.4	50.4	61.7
	One	27.6	32.3	32.9	31.9	46.2	34.3
	Both	3.4	3.4	4.7	4.7	3.4	4.0
USNA Legacy	No	92.1	94.2	91.8	91.8	94.0	92.8
	Yes	7.9	5.8	8.2	8.2	6.0	7.2
N		203	325	319	317	266	1430

The demographic and social structural influences on midshipmen orientations are gender, minority status, father's education level, mother's education level, and mother's work experience when the respondent was young. The effects of gender, race/ethnicity, and parental experiences have a lengthy history in the socialization literatures. Total SAT is included in this analysis as a measure of academic ability and a proxy for high school program, an aspect of the respondent's prior social environment. Table 7.2 is a

correlation matrix constructed of the prior experience variables and orientations of incoming midshipmen at wave 1 of the MAS. This matrix highlights several relationships between midshipmen orientations and prior socialization experiences, demographic, and social structural factors.

In Table 7.2, the only statistically significant relationship between influence job values and the prior experience/demographic/social structural variables under consideration are father's education level ( $r = .201, p = .004$ ) and mother's work experience ( $r = .142, p = .045$ ). Midshipmen whose fathers had higher education, and /or whose mothers worked more when they were young had higher influence values. No other prior experiences or circumstances exhibit strong relationships with preferences for the influence characteristics of work. As for other job values relationships, minority midshipmen placed greater value in the extrinsic aspects of work ( $r = .244, p = .001$ ) and those midshipmen whose mothers worked more when they were young had higher intrinsic ( $r = .256, p < .001$ ) and social altruism ( $r = .168, p = .017$ ) job values.

Midshipmen who attended one of the Naval Academy's prep school feeder sources expressed more interest in social altruism, or jobs that allow contact with friends or a lot of people and that are worthwhile ( $r = .138, p = .050$ ), while midshipmen who attended Summer Seminar placed less emphasis on the intrinsic aspects of work ( $r = -.186, p = .008$ ). The relationship between Summer Seminar attendance and self-selecting to the Naval Academy may overshadow the interests individuals have in the inherent characteristics of future jobs. In other words, Summer Seminar attendees may self-select to the Naval Academy because they do not value the individualistic aspects of work or, as a result of information they receive during this indoctrination, they may use



anticipatory socialization to de-emphasize the job values they know the organization does not regard highly.

The relationship between total SAT score and job values is negative for all six of the job values scales and is statistically significant for all scales except one (influence). This may, in fact, not explain a negative relationship between academic achievement and job values, but indicate that higher academic achievement results in a better understanding of individual abilities and a more realistic evaluation what is valued in a job. In other words, the most capable individuals academically do not necessarily hold the most idealistic job values. On the other hand, total SAT shares a positive relationship with individual work beliefs ( $r = .175$ ,  $p = .013$ ) and indicates that midshipmen with higher academic achievement scores believe work will more central to them. Likewise, midshipmen with more highly educated mothers also believe work will be more central to them ( $r = .210$ ,  $p = .003$ ). In addition, midshipmen who have more highly educated fathers and midshipmen who attended Summer Seminar believe work will be more central and important, although the associations fail to achieve statistical significance.

The two military attitude variables included in this matrix have been shown to be strong indicators of propensity to serve in the military (Bachman et al. 1998; National Research Council 2003) and any variables in this matrix associated with them may be antecedents of youth preferences for military service. However, only mothers' educational attainment had a significant relationship and midshipmen whose mothers had higher educational attainment expressed the most positive attitudes about the military as a workplace ( $r = .170$ ,  $p = .016$ ). While there are no statistically significant relationships with the military opportunity scale at the  $p \leq .05$  level, attending a prep school and having

prior military service are significant at the  $p \leq .10$  level. While several of these prior experience variables may be associated with more positive views of military work, it is just as likely that the pro-military attitudes of incoming midshipmen are a result of the anticipatory socialization of individuals entering the organization.

The distribution of Plebes on most of the work orientation measures exhibits a slight negative skew due to the more idealistic or positive responses of this group. The distributions of the Plebes on the military identity salience measures are positively skewed which may indicate a lower mean selection of these role identities. This is perhaps a result of response or method bias in the original role identity question where midshipmen were asked to list in order the top three role identities from twenty different choices. However, there were no substantial differences observed between wave 1 and wave 2 identity salience measures despite two different modes of data collection.<sup>30</sup> Other explanations for the positive skew are due to individual differences in the definitions of military role identities or the strength of other role identities.

Among the four military role identity salience measures, service identity salience shares the largest number of positive and significant correlations. Not surprisingly, prior military service has a strong and statistically significant association with service identity salience ( $r = .657$ ,  $p \leq .001$ ), even considering the small number of midshipmen who have prior service. In addition, prep school ( $r = .160$ ,  $p = .022$ ) and mother's work experience ( $r = .142$ ,  $p = .043$ ) share positive correlations with a service role identity, while the relationship to mother's educational attainment is negative but only statistically significant at the  $p \leq .10$  level ( $r = -.136$ ,  $p = .053$ ). The association between attending

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<sup>30</sup> For the Plebe group (2007), wave 1 of the MAS was collected as a group in the Naval Academy dining hall using a paper instrument. For wave 2 of the MAS and for all other respondents at wave 1, individually administered, web-based surveys were taken on personal computers during a two-week response period.

prep school and a service identity is likely due to those midshipmen with enlisted service backgrounds who arrived at the Naval Academy via the Naval Academy Prep School. Attending the Naval Academy Summer Seminar is statistically significant only with officer identity salience ( $r = .197, p = .005$ ). Total SAT, on the other hand, is negatively correlated with leader identity salience ( $r = -.168, p = .017$ ) and has a positive relationship with midshipman identity salience ( $r = .169, p = .016$ ).

**Table 7.2 Prior Socialization/Demographic/Social Structure Correlation Matrix**  
**USNA 2007\_wave 1<sup>31</sup>**

		Gender	Minority	Father's Education Level	Mother's Education Level	Mother Paid Job When R Young	Prep School	Military Service (MIDN)	Summer Seminar Attendee	Military Parent	USNA Legacy	Total SAT
Extrinsic Job Values wave 1	r	.040	.244	-.051	-.045	.067	.091	.022	.066	-.034	-.035	-.175
	Sig.	.571	.001	.478	.528	.347	.199	.754	.352	.636	.628	.013
	N	199	199	197	198	199	199	199	199	199	199	199
Influence Job Values wave 1	r	-.028	.049	.201	.049	.142	.088	.053	.064	.041	.022	-.019
	Sig.	.698	.493	.004	.490	.045	.215	.454	.370	.568	.760	.790
	N	200	200	198	199	200	200	200	200	200	200	200
Intrinsic Job Values wave 1	r	-.042	-.026	-.009	.026	.256	.115	-.037	-.186	.027	-.064	-.166
	Sig.	.558	.721	.905	.718	.000	.106	.599	.008	.706	.366	.019
	N	199	199	197	198	199	199	199	199	199	199	199
Leisure Job Values wave 1	r	-.096	.127	-.014	-.063	.025	.062	-.064	-.110	.038	-.044	-.201
	Sig.	.176	.073	.849	.376	.729	.385	.365	.121	.593	.531	.004
	N	201	201	199	200	201	201	201	201	201	201	201
Security Job Values wave 1	r	-.104	.095	-.120	-.043	.066	.012	-.056	-.089	-.062	-.126	-.216
	Sig.	.140	.178	.092	.547	.350	.864	.426	.209	.383	.074	.002
	N	201	201	199	200	201	201	201	201	201	201	201
Social Altruism Job Values wave 1	r	-.008	.110	.005	.024	.168	.138	.045	-.110	.078	-.017	-.157
	Sig.	.912	.121	.939	.739	.017	.050	.525	.122	.274	.806	.026
	N	201	201	199	200	201	201	201	201	201	201	201

<sup>31</sup> Significant bivariate relationships ( $p \leq .05$ ) are shaded for ease of viewing; however, there are several relationships of interest that are significant at the  $p \leq .10$  level. The lack of statistical significance may be a function of sample size ( $N = 203$ ).

		Gender	Minority	Father's Education Level	Mother's Education Level	Mother Paid Job When R Young	Prep School	Military Service (MIDN)	Summer Seminar Attendee	Military Parent	USNA Legacy	Total SAT
Work Beliefs wave 1	r	.048	.004	.136	.210	.061	-.015	.086	.129	-.116	-.052	.175
	Sig.	.500	.953	.056	.003	.393	.831	.223	.068	.101	.463	.013
	N	201	201	199	200	201	201	201	201	201	201	201
Military as a Place to Work wave 1	r	.044	.004	.066	.170	.019	.060	.052	.073	-.051	-.010	.085
	Sig.	.533	.960	.356	.016	.786	.397	.466	.303	.470	.891	.233
	N	200	200	199	200	200	200	200	200	200	200	200
Military Opportunity wave 1	r	.085	-.027	.036	-.054	.088	.127	.119	-.063	-.056	.016	-.122
	Sig.	.236	.705	.614	.454	.219	.075	.095	.374	.430	.818	.087
	N	198	198	196	197	198	198	198	198	198	198	198
Leader Identity Salience wave 1	r	-.056	-.045	.029	.055	.044	.017	-.018	.091	.012	-.014	-.168
	Sig.	.425	.523	.685	.436	.538	.812	.801	.196	.868	.841	.017
	N	203	203	200	201	202	203	203	203	203	203	203
Midshipman Identity Salience wave 1	r	.126	.046	.043	.044	.014	-.045	-.100	.098	-.060	-.082	.169
	Sig.	.073	.516	.541	.539	.838	.522	.154	.165	.397	.243	.016
	N	203	203	200	201	202	203	203	203	203	203	203
Officer Identity Salience wave 1	r	-.012	-.038	.007	.096	.080	.027	.015	.197	.067	-.065	.062
	Sig.	.867	.589	.925	.176	.259	.700	.837	.005	.341	.358	.382
	N	203	203	200	201	202	203	203	203	203	203	203
Service Identity Salience wave 1	r	-.034	.072	-.093	-.136	.142	.160	.657	-.053	-.059	-.098	-.077
	Sig.	.628	.306	.189	.053	.043	.022	.000	.455	.406	.163	.275
	N	203	203	200	201	202	203	203	203	203	203	203

### Role Identity Saliency

The distributions of role identity saliency for the Plebes at waves 1 and 2 are provided in Table 7.3. Of the role identities listed as number one, or most important to Plebes, a religious role identity was rated nearly six percentage points higher than the next highest role at the beginning of plebe summer and seven points higher at the completion of plebe summer. For many of these incoming midshipmen, their religious identity is very important and remains important despite the intensive military socialization. If religious identity had increased from wave 1 to wave 2, an explanation might be the association of midshipmen with individuals of similar background during a stressful and difficult period of adjustment to the Academy or the result of the religious support systems available during plebe summer. In fact, the Naval Academy is the only one out of the four Federal service academies that continues to hold daily mealtime prayers before its assembled student body (Sabar 2002).

After religion, the second most important identities selected by Plebes at wave 1 were midshipman role identity and the friend role identity. At wave 2, the midshipman role identity was rated the second most important role behind religion, while the role of friend had dropped to the fourth most important identity after the son or daughter role. The increase in ratings of son or daughter at the end of plebe summer is possibly the result of the social support provided by families to incoming midshipmen during this difficult indoctrination period. This increase might also be due to the permanent departure of youth from home and family and the realization that this role identity is the most important tie to the former civilian life.

Overall, there appears to be considerable consistency in the identity salience of Plebes from wave 1 to wave 2, except for the military role identities. In Table 7.3, when the three most important role identities listed by Plebes are combined as a measure of minimum salience, or whether the military role is at all salient, the midshipman role is ranked number one of the twenty identities at both waves 1 and 2.<sup>32</sup> In addition, the percentage of incoming Plebes who rated the midshipman role as one of their top three identities increased from wave 1 to wave 2. This increase in role identity salience at first appears to be a function of initial socialization to the organization, but turns out to be mostly a result of bias in sample attrition. Post hoc analysis shows that, of the Plebes who responded to both waves of the survey, 12.9% at wave 1 and 13.0% at wave 2 rated the midshipman role identity as one of their top three identities, while 9.3% the non-respondent Plebes at wave 2 rated midshipman role identity as one of their top three identities at wave 1.<sup>33</sup>

When minimum role identity salience percentages for Plebes who responded to both waves of the survey are ranked, the midshipmen role was first, the future military officer role was fourth, the leader role seventh, and service role identity was twelfth. For Plebes who responded to only wave 1, the leader role identity was ranked first, midshipman role fourth, future military officer role ninth, and the service identity was ranked eleventh. At a minimum, midshipman role identity appears to be a function of prior conditions and orientations rather than the process of indoctrination occurring

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<sup>32</sup> The minimum role identity salience is the percentage of respondents who listed the identity as any of the top three role identities. The relative ranking is based on this percentage.

<sup>33</sup> The Plebe non-respondents at wave 2 had the following overall role identity rankings at wave 1: 1. Leader (11.1%); 2. Friend (9.7%); 3. Son or daughter (9.7%); 4. Midshipman (9.3%); 5. Christian, Jew, Muslim or member of a religion (7.1%); 6. Athlete (7.1%); 7. American or other nationality (7.1%); 8. Intellectual (6.2%); 9. Future military officer (5.6%); 10. Student (4.9%); and 11. Sailor, Soldier, Airman, Marine (4.9%).

during plebe summer. Plebes who responded to both waves of the survey appear to hold stronger specific military roles identities (midshipman and then future military officer) than those who did not (leader and then midshipman). Likewise, if responding to surveys is considered supportive of organizational goals, then Plebes with higher midshipmen role identity salience are more likely to participate positively. It is interesting to note that during this intense socialization period of plebe summer, more than 80% of the Plebes did not choose midshipman identity as any of their top 3 role identities.

**Table 7.3 Role Identity Distribution at Wave 1 and Wave 2, USNA Plebes**

Role Identity	Wave 1			Wave1		Wave 2			Wave2	
	Role Identity Percent			Minimum		Role Identity Percent			Minimum	
	Role 1	Role 2	Role 3	Roles 1-3	Rank 1-3	Role 1	Role 2	Role 3	Roles 1-3	Rank 1-3
Midshipman	10.9	11.4	12.3	11.5	1	12.9	14.3	11.9	13.0	1
Friend	10.9	12.9	8.7	10.6	2	9.7	14.3	9.5	11.2	3
Christian, Jew, Muslim or member of a religion	18.3	4.0	4.1	8.8	3	18.5	3.2	5.6	9.0	5
Son or daughter	8.9	9.9	6.2	8.3	4	12.1	14.3	7.1	11.2	2
Leader	7.4	8.9	8.7	8.3	5	6.5	6.3	3.2	5.3	8
Future military officer	6.9	6.9	10.8	8.2	6	11.3	11.9	9.5	10.9	4
Athlete	5.0	9.4	7.2	7.2	7	1.6	4.8	10.3	5.6	7
American or other nationality	6.4	6.4	4.1	5.7	8	8.9	4.0	4.0	5.6	6
Intellectual	5.0	7.4	3.6	5.3	9	4.8	3.2	3.2	3.7	11
Student	5.0	4.5	4.1	4.5	10	2.4	6.3	4.0	4.3	10
Brother or Sister	2.0	5.0	6.2	4.3	11	4.0	2.4	4.0	3.5	12
Sailor, Soldier, Airman, Marine	4.0	4.0	4.1	4.0	12	3.2	7.1	3.2	4.5	9
Girlfriend or boyfriend	1.5	2.0	4.6	2.7	13	0.8	2.4	4.8	2.7	14
Other	3.5	2.0	1.0	2.2	14	2.4	0.8	4.8	2.7	13
Worker	2.0	1.5	2.6	2.0	15	0.0	2.4	4.0	2.0	15
Musician or Artist	0.0	0.5	4.1	1.5	16	0.8	0.0	4.8	1.9	16
Outdoorsman	1.5	0.5	2.1	1.3	17	0.0	0.0	4.8	1.6	17
Recreation Participant	0.0	1.5	2.6	1.3	18	0.0	0.0	0.0	0.0	20
Single/unattached	1.0	0.5	1.5	1.0	19	0.0	0.8	0.8	0.5	19
Racial or ethnic group member	0.0	1.0	1.5	0.8	20	0.0	1.6	0.8	0.8	18
Total	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	
N	202	202	195	599		124	126	126	376	
Missing	1	1	8	10		2	0	0	2	



To understand further the factors influencing the military identity salience of incoming midshipmen and their military career orientations, OLS regression analysis was conducted using data from incoming midshipmen who took wave 1 of the MAS in July 2003. The variables in the correlation matrix in Table 7.2 were included in this model, termed the prior experiences and orientations model. The regression of identity salience measures and military career expectations on items hypothesized to influence individuals before arrival at the Naval Academy produced results presented in Tables 7.4 – 7.8. Administering attitudinal measures during the first week of summer training may reflect some method bias, but doing so also attempts to capture initial measures of organizational “fit”. In this case, higher organizational “fit” would be exhibited through positive, significant predictors and evidenced by higher role identity salience and greater expectations of a military career.

In the results of the regression analysis (Table 7.4), midshipman identity salience is predicted in the prior experiences and orientations model.<sup>34</sup> Although the adjusted  $R^2$ , or the proportion of explained variance by the model, is reasonable and statistically significant ( $R^2 = .167$ ,  $p < .001$ ), no positive individual socialization predictors reach

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<sup>34</sup> OLS regression analysis was conducted as a single stage model with all of the predictors entered at the same time and as a 3-stage model with the DEMOG or background and prior experience variables entered first, orientations at wave 1 entered second, and role identity salience entered third. For all of the analyses of Plebe orientations, except the prediction of midshipman identity salience, the variables that are significant predictors in the single stage model were statistically significant in the 3-stage model as well. For the first stage of the midshipman identity salience model, gender (women  $Beta = .166$   $p = .03$ ) and higher SAT scores (SAT  $Beta = .269$   $p = .006$ ) predicted higher midshipmen identity but the overall explained variance in this stage of the model was not statistically significant (adj  $R^2 = .032$   $p = .105$ ). In the second stage, midshipmen with prior military service ( $Beta = -.149$   $p = .044$ ) predicted lower midshipman identity, as well as those that expressed higher leisure ( $Beta = -.211$   $p = .027$ ) and social altruism ( $Beta = -.230$   $p = .005$ ) job values (adj  $R^2 = .134$   $p = .001$ ). The third stage of the model is identical to the model presented in Table 7.4. From this it appears that gender and prior military service help to predict midshipmen identity salience at first but the small numbers of women and midshipmen with prior service experience affects the limited amount of explained variance and are overshadowed later by stronger predictors. A single stage model of prior experiences will be presented for the remainder of the results.

statistical significance. Of those positive predictors in this model, the influence job values of newcomers are strongest (Beta = .130,  $p = .105$ ). The statistically significant predictors in the model all have negative coefficients and are leisure job values (Beta = -.253), social altruism job values (Beta = -.239), and officer identity salience (Beta = -.185). In fact, all three of the military role identities are negative predictors of midshipman identity salience. This is perhaps a function of the forced choice nature of the identity salience question and a result of differing individual definitions of military roles. In addition, being the child of an Academy graduate is a negative predictor of midshipman role identity salience at the  $p \leq .10$  level.

The data suggests that the midshipman role identity expressed by Plebes is largely a function of anticipatory socialization associated with assuming this new and highly visible role. No prior experience or orientation variables emerge in the final model to explain this role identity other than variables that predict those Plebes who do not express higher midshipman identity salience. This, combined with the fact that the midshipman role is ranked the top identity upon arrival and changes very little after initial plebe summer socialization, highlights the process of individuals preparing themselves to assume the orientations and roles of the organization they are entering.

**Table 7.4 Multiple Regression: Midshipman Identity Salience at Wave 1, USNA Plebes**

Model <sup>a, b, c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	b		Beta		
1 (Constant)	-.025	1.500		-.017	.986
DEMOG_Gender	.234	.209	.082	1.120	.264
DEMOG_Minority	.201	.187	.082	1.074	.284
DEMOG_Father's Education Level	.039	.085	.042	.463	.644
DEMOG_Mother's Education Level	-.030	.095	-.029	-.320	.749
DEMOG_Mother Paid Job When R young	.069	.064	.079	1.093	.276
DEMOG_Prep School	.193	.211	.080	.916	.361
DEMOG_Military Service (MIDN)	-.365	.413	-.082	-.884	.378
DEMOG_Summer Seminar Attendee	.041	.159	.019	.256	.798
DEMOG_Military Parent	.071	.150	.037	.476	.635
DEMOG_USNA Legacy	-.574	.298	-.148	-1.923	.056
DEMOG_Total SAT	.084	.001	.105	1.061	.290
Job Values (Extrinsic) Scale wave 1	-.001	.132	.000	-.001	.999
Job Values (Influence) Scale wave 1	.230	.141	.130	1.629	.105
Job Values (Intrinsic) Scale wave 1	-.204	.258	-.066	-.791	.430
Job Values (Leisure) Scale wave 1	-.417	.155	-.253	-2.690	.008**
Job Values (Security) Scale wave 1	.033	.134	.021	.245	.807
Job Values (Social Altruism) Scale wave 1	-.441	.148	-.239	-2.972	.003**
Work Beliefs Scale wave 1	.168	.149	.100	1.129	.260
Military as a Place to Work wave 1	.213	.169	.107	1.260	.209
Military Opportunity Scale wave 1	-.002	.131	-.001	-.014	.989
Military Service Important to R wave 1	.106	.118	.080	.902	.368
Officer Identity Salience wave 1	-.217	.084	-.185	-2.587	.011*
Leader Identity Salience wave 1	-.150	.083	-.134	-1.819	.071
Service Identity Salience wave 1	-.163	.138	-.109	-1.178	.240

a. Dependent Variable: Midshipman Identity Salience wave 1; Selecting only cases for which Academic Class= 2007

b.  $R^2 = .270$ , adj.  $R^2 = .167$ ,  $F(24, 170) = 2.621$ ,  $p < .001$  (N = 195)

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .01$

In Table 7.5, prior experiences and orientations are used to predict leader identity salience. In this model, the explained variance is significant (adj.  $R^2 = .111$ ,  $p = .006$ ), and positive predictor variables are present. Total SAT is the strongest predictor of leader identity salience. However, the coefficient is negative (Beta = -.371). The Plebes who attended Summer Seminar (Beta = .168) and those Plebes for whom work is more

central and important (Beta =.209) expressed higher leader identity salience, while the remaining identity salience measures act as negative predictors of the leader role.

**Table 7.5 Multiple Regression: Leader Identity Salience at Wave 1, USNA Plebes**

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t	Sig.
	b				
1 (Constant)	2.418	1.367		1.768	.079
DEMOG_Gender	-.350	.191	-.138	-1.831	.069
DEMOG_Minority	-.205	.172	-.094	-1.187	.237
DEMOG_Father's Education Level	-.014	.078	-.016	-.171	.864
DEMOG_Mother's Education Level	.047	.087	.050	.535	.594
DEMOG_Mother Paid Job When R young	.020	.059	.025	.340	.734
DEMOG_Prep School	-.321	.193	-.149	-1.665	.098
DEMOG_Military Service (MIDN)	.269	.380	.068	.709	.479
DEMOG_Summer Seminar Attendee	.316	.144	.168	2.186	.030*
DEMOG_Military Parent	.010	.138	.058	.720	.473
DEMOG_USNA Legacy	-.212	.277	-.061	-.764	.446
DEMOG_Total SAT	-.027	.001	-.371	-3.780	.000***
Job Values (Extrinsic) Scale wave 1	.084	.121	.057	.697	.487
Job Values (Influence) Scale wave 1	.154	.130	.098	1.179	.240
Job Values (Intrinsic) Scale wave 1	.047	.238	.017	.195	.845
Job Values (Leisure) Scale wave 1	-.272	.144	-.186	-1.891	.060
Job Values (Security) Scale wave 1	-.014	.124	-.010	-.111	.912
Job Values (Social Altruism) Scale wave1	-.028	.140	-.002	-.020	.984
Work Beliefs Scale wave 1	.314	.135	.209	2.321	.021*
Military as a Place to Work wave 1	-.061	.156	-.035	-.394	.694
Military Opportunity Scale wave 1	.081	.120	.051	.674	.501
Military Service Important to R wave 1	.033	.108	.028	.304	.761
Officer Identity Salience wave 1	-.162	.078	-.155	-2.083	.039*
Midshipman Identity Salience wave 1	-.127	.070	-.143	-1.819	.071
Service Identity Salience wave 1	-.284	.126	-.214	-2.260	.025*

a. Dependent Variable: Leader Identity Salience wave 1, Selecting only cases for which Academic Class = 2007

b.  $R^2 = .221$ , adj.  $R^2 = .111$ ,  $F(24, 170) = 2.008$ ,  $p = .006$  ( $N = 195$ )

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

It seems reasonable that by stressing the possibilities of individual achievement and goal attainment in the military and serving as a primary recruiting tool for the Academy, Summer Seminar increases the salience of the leader role for newcomers to the organization. It is also not surprising that stronger work beliefs predict leadership identity since leadership, hard work, and military service are often synonymous. In this

model, gender, prep school attendance, leisure job values and the midshipman role identity are negative predictors of the leader identity at the  $p \leq .10$  level.

In Table 7.6, the prior experiences and orientations model predicts service identity salience. The explained variance in this model is substantial ( $\text{adj. } R^2 = .436$ ,  $p < .001$ ) and the strongest predictor is prior military service by the respondent ( $\text{Beta} = .621$ ).

**Table 7.6 Multiple Regression: Service Identity Salience at Wave 1, USNA Plebes**

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	b		Beta		
1 (Constant)	.107	.830		.129	.898
DEMOG_Gender	-.089	.116	-.047	-.766	.445
DEMOG_Minority	.039	.104	.024	.375	.708
DEMOG_Father's Education Level	.018	.047	.029	.393	.695
DEMOG_Mother's Education Level	-.065	.052	-.092	-1.245	.215
DEMOG_Mother Paid Job When R Young	.032	.035	.054	.901	.369
DEMOG_Prep School	-.067	.117	-.041	-.576	.565
DEMOG_Military Service (MIDN)	1.855	.179	.621	10.360	.000***
DEMOG_Summer Seminar Attendee	.100	.088	.071	1.143	.255
DEMOG_Military Parent	.001	.083	.000	.001	.999
DEMOG_USNA Legacy	-.193	.166	-.074	-1.161	.247
DEMOG_Total SAT	-.001	.000	-.018	-.223	.824
Job Values (Extrinsic) Scale wave 1	.077	.073	.070	1.064	.289
Job Values (Influence) Scale wave 1	.003	.079	.002	.033	.974
Job Values (Intrinsic) Scale wave 1	.079	.143	.038	.554	.581
Job Values (Leisure) Scale wave 1	-.110	.087	-.099	-1.260	.210
Job Values (Security) Scale wave 1	-.120	.074	-.113	-1.635	.104
Job Values (Social Altruism) Scale wave 1	.019	.084	.015	.224	.823
Work Beliefs Scale wave 1	.017	.082	.015	.201	.841
Military as a Place to Work wave 1	.011	.094	.001	.012	.991
Military Opportunity Scale wave 1	-.021	.072	-.002	-.029	.977
Military Service Important to R wave 1	.094	.065	.105	1.444	.151
Midshipman Identity Salience wave 1	-.050	.042	-.074	-1.178	.240
Officer Identity Salience wave 1	-.006	.047	-.008	-.131	.896
Leader Identity Salience wave 1	-.103	.045	-.136	-2.260	.025*

a. Dependent Variable: Service Identity Salience wave 1, Selecting only cases for which Academic Class = 2007

b.  $R^2 = .506$ ,  $\text{adj. } R^2 = .436$ ,  $F(24, 170) = 7.244$ ,  $p < .001$  ( $N = 195$ )

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The only other significant predictor variable in the model is leader identity, although the coefficient is negative ( $\text{Beta} = -.136$ ). Despite the small number of Plebes who enter the

Academy directly from the Navy, the socializing influence of prior military service on role identity is great.

**Table 7.7 Multiple Regression: Officer Identity Salience at Wave 1, USNA Plebes**

Model <sup>a,b,c</sup>	Unstandardized Coefficients		Standardized Coefficients		
	b	Std. Error	Beta	t	Sig.
1 (Constant)	-1.387	1.339		-1.036	.302
DEMOG_Gender	-.148	.188	-.061	-.789	.431
DEMOG_Minority	.017	.168	.008	.101	.920
DEMOG_Father's Education Level	-.039	.076	-.049	-.516	.607
DEMOG_Mother's Education Level	.074	.085	.083	.879	.381
DEMOG_Mother Paid Job When R young	.046	.057	.061	.809	.420
DEMOG_Prep School	.099	.189	.048	.529	.598
DEMOG_Military Service (MIDN)	-.046	.370	-.012	-.125	.900
DEMOG_Summer Seminar Attendee	.409	.139	.228	2.943	.004**
DEMOG_Military Parent	.267	.133	.162	2.008	.046*
DEMOG_USNA Legacy	-.443	.268	-.133	-1.652	.100
DEMOG_Total SAT	-.001	.001	-.016	-.150	.881
Job Values (Extrinsic) Scale wave 1	-.019	.118	-.013	-.159	.874
Job Values (Influence) Scale wave 1	-.029	.127	-.020	-.231	.817
Job Values (Intrinsic) Scale wave 1	.296	.231	.113	1.282	.202
Job Values (Leisure) Scale wave 1	-.223	.141	-.158	-1.585	.115
Job Values (Security) Scale wave 1	.058	.120	.043	.485	.628
Job Values (Social Altruism) Scale wave1	-.211	.135	-.134	-1.558	.121
Work Beliefs Scale wave 1	.207	.133	.144	1.559	.121
Military as a Place to Work wave 1	.082	.152	.048	.538	.592
Military Opportunity Scale wave 1	.069	.117	.046	.592	.555
Military Service Important to R wave 1	.141	.105	.125	1.341	.182
Service Identity Salience wave 1	-.016	.124	-.013	-.131	.896
Midshipman Identity Salience wave 1	-.174	.067	-.204	-2.587	.011*
Leader Identity Salience wave 1	-.154	.074	-.160	-2.083	.039*

a. Dependent Variable: Officer Identity Salience wave 1, Selecting only cases for which Academic Class = 2007

b.  $R^2 = .196$ , adj.  $R^2 = .082$ ,  $F(24, 170) = 1.727$ ,  $p = .025$  ( $N = 195$ )

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 7.7, the prior experiences and orientations model is used to predict officer role identity salience. The explained variance for this model is lower than the other military role identity models (adj.  $R^2 = .082$ ,  $p = .025$ ). Both midshipman (Beta = -.204) and leader identity (Beta = -.160) salience are significant predictors of officer identity, but as before, they are negative coefficients. In addition, being the child

of an Academy graduate negatively predicts the officer identity salience at the  $p \leq .10$  level. The presence of two positive predictors highlights the effects of prior socialization experiences. Plebes who attended the Naval Academy Summer Seminar (Beta = .228) expressed higher officer role identity salience which is possibly associated with the presentation of military occupational opportunities during this indoctrination seminar as well as the recruiting emphasis placed on those attendees who ultimately apply to the Naval Academy. The interest shown by a prestigious college no doubt creates some positive affect in individuals and may influence individual role identity salience.

In addition, those Plebes having at least one parent with military experience (Beta = .162) expressed higher officer identity salience. The relationship between parental occupational experience and role identity salience points toward the socializing effects of parental occupations and values on their children in the tradition of Kohn and Schooler (1969; 1982). In addition, looking beyond the parental experiences to the socializing effects of being a military child and living a military lifestyle indicates the potential of social learning on role identity. It can be reasonably argued that the experiences gained through these prior interactions provide input to the formation of this future oriented military role identity.

In the preceding tables, there are distinct effects observed for several of the predictor variables in the prior experiences and orientations model. For instance attending Summer Seminar has a positive effect on both leader and officer role identity. The percentage of Plebes attending this indoctrination program has increased over the years and its influence in shaping the incoming orientations of newcomers appears to be important. Likewise, there is no doubt that prior enlisted military service and being the

child of a military service member plays a large and significant part in the identity formation of youth entering the Academy, but whether the effects are sustained across four years of officer training is yet to be assessed.

The apparent dichotomous relationship observed in these models between each of the dependent variables and the other military role identities helps explain why individuals do not choose certain role identities. The midshipman role identity is about the present, while the officer identity is future-oriented and an outcome of the midshipman role. While these two items are not mutually exclusive it seems more likely that Plebes would be focused on succeeding in the present role before seeing themselves in the future officer role, thus their overall favored role is that of midshipman. It seems reasonable that because the future military officer role is a distant goal for most Plebes, it would not be rated higher by midshipmen who, through anticipatory socialization, are heavily involved in the present midshipman role. Likewise, those Plebes who rated the more general leader role higher see themselves exhibiting certain general or individual characteristics and behaviors but are either not certain about their long term plans in the organization or have yet to assimilate other more specific military role identities.

The previous explanation may also hold for the higher frequency of the leader role identity expressed by Plebe non-respondents to wave 2 of the survey. These individuals have perhaps self-selected to the Academy because of their strong individual orientations and not because of any prior experiences. It seems reasonable that most Plebes would not associate the leader identity with military roles because their present position in the organization is one of untrained and inexperienced follower, while the upperclass role models are the leaders. Finally, the service identity is negatively



predicted by leader role identity because the leader identity is not typically associated with the prior military role of enlisted follower. Although the prior enlisted Plebes have outstanding performance and academic records, they did not serve in leadership roles while on active duty and they have not yet advanced to the officer status they observed while in the Fleet and, therefore, still identify with follower role of Sailor or Marine.

Having highlighted several relationships in the military role identity salience of Plebes, Table 7.8 presents the results of the predicted relationship between prior experiences and orientations and the military career expectations of incoming midshipmen. In this model, higher organizational “fit” hypothetically occurs because of positive predictors related to prior experiences with or knowledge of the organization and higher military role identity is an indicator of internalization of organizational knowledge and values. The explained variance in this model of career expectations is high (adj.  $R^2 = .352$ ,  $p < .001$ ) and is indicative of the strong relationships present. Plebes who rated military service as more important to them (Beta = .240) expressed more certain plans for a military career. The strongest predictor of military career expectations in this group of newcomers to the organization is a positive evaluation of the military as a workplace (Beta = .405). In formulating their career plans, the internalized value of military work and service appears to be less important for newcomers than the evaluation of the military as a workplace.

Given that internalized goals and values are represented through more salient role identities, officer identity salience (Beta = .160) is the only one of four identity measures that significantly predicts career expectations. Interestingly, the greater the early work experience of the mothers of Plebes, the more certain their military career plans are

(Beta = .128). It may be that entering the Academy and pursuing a military career is a means of status attainment resulting from the family and social background characteristics of some midshipmen. However, since the mean educational attainment of mothers of midshipmen is high, the more certain career expectations associated with mothers' early work experience may not be related to lower socio-economic status or class, but reflect the social and educational choices and opportunities available to children of dual-working and professional parents.

Minority status (Beta = -.143), on the other hand, is a negative predictor of military career expectations and indicates that, incoming minority Plebes are less certain they will have a career in the military than non-minority midshipmen. There are a number of reasons why this may be the case such as, a lack of minority role models who attended a service academy or became military officers in local high schools or in families. This finding may also be explained by a perception that the organization is not supportive or conducive to minority career officers, or a belief that attending the Naval Academy, but not spending a career in the military, is an opportunity to attain higher occupational or social status. In addition, those newcomers who value the individual or intrinsic aspects of work more express lower plans for a career in the military organizational entry, although this predictor is significant at the  $p \leq .10$  level. In this model of incoming midshipmen, there is no significant gender difference in the career expectations Plebes at wave 1, highlighting again the strong effects of anticipatory socialization to this new organization.

**Table 7.8 Multiple Regression: Military Career Expectations at Wave 1, USNA Plebes**

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
	b		Beta		
1 (Constant)	1.040	.732		1.421	.157
DEMOG_Gender	.097	.102	.062	.946	.346
DEMOG_Minority	-.194	.092	-.143	-2.110	.036*
DEMOG_Father's Education Level	-.015	.041	-.029	-.357	.722
DEMOG_Mother's Education Level	-.006	.046	-.010	-.130	.897
DEMOG_Mother Paid Job When R Young	.062	.031	.128	2.004	.047*
DEMOG_Prep School	-.019	.103	-.014	-.182	.856
DEMOG_Military Service (MIDN)	-.004	.202	-.002	-.019	.984
DEMOG_Summer Seminar Attendee	-.088	.078	-.076	-1.130	.260
DEMOG_Military Parent	-.051	.073	-.048	-.701	.484
DEMOG_USNA Legacy	.110	.147	.051	.746	.457
DEMOG_Total SAT	-.001	.000	-.089	-1.018	.310
Job Values (Extrinsic) Scale wave 1	.052	.064	.058	.815	.416
Job Values (Influence) Scale wave 1	.023	.069	.023	.325	.746
Job Values (Intrinsic) Scale wave 1	-.220	.126	-.130	-1.745	.083
Job Values (Leisure) Scale wave 1	.015	.077	.017	.196	.845
Job Values (Security) Scale wave 1	.001	.066	.001	.010	.992
Job Values (Social Altruism) Scale wave 1	-.049	.074	-.048	-.664	.508
Work Beliefs Scale wave 1	.062	.073	.067	.854	.395
Military as a Place to Work wave 1	.444	.083	.405	5.361	.000***
Military Opportunity Scale wave 1	.054	.064	.055	.839	.403
Military Service Important to R wave 1	.176	.058	.240	3.055	.003**
Officer Identity Salience wave 1	.103	.042	.160	2.475	.014*
Leader Identity Salience wave 1	-.020	.041	-.033	-.502	.616
Service Identity Salience wave 1	.021	.068	.026	.317	.751
Midshipman Identity Salience wave 1	-.017	.037	-.030	-.442	.659

a. Dependent Variable: Military Career Expectations wave 1; Selecting only cases for which Academic Class = 2007

b.  $R^2 = .436$ , adj.  $R^2 = .352$ ,  $F(25, 168) = 5.202$ ,  $p < .001$  ( $N = 194$ )

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

This section on the prior experiences and orientations of incoming midshipmen has highlighted the influence of several prior socialization factors and suggests the probability that many of the strongest orientations held by Plebes are a result of the self-selection and anticipatory socialization of individuals to the organization and not a result of the intense organizational socialization occurring during plebe summer. In addition, it seems reasonable to assume that the various military role identities have differing

meanings for Plebes because they are associated with different conceptualizations of the military and Naval Academy life. As a result, the military role identities of Plebes can be characterized as: the *service role identity* being associated with *something they have been*, the *midshipman role identity* as *something they are doing*, the *leader role identity* as a characteristic of, or *something they think they are*, and the *officer role identity* as *something they will or hope to be*.

This conceptualization of military role identity helps to explain the positive relationship between officer role identity salience and military career expectations in Plebes. The incoming midshipmen whose goals and values are more congruent at the outset with those of the military organization place more importance on this form of work, see the military as a more positive occupational environment, and hold the role identity associated with this work more salient. For those newcomers to the organization who believe the work is important, the workplace is good, and for whom the role is internalized, military career expectations are most certain. For these particular individuals, however, the centrality and importance of work itself are not primary factors explaining plans to make the military a career, but their views of the workplace itself are important for that decision. The next section begins to investigate whether or not these relationships hold for midshipmen who have been in the organization for a longer period.

#### Socialization and Time Spent in the Organization

In the preceding section, prior experiences, demographic, and social structural characteristics of incoming midshipmen were used to predict two measures of organizational “fit”: role identity salience and military career expectations. This section addresses the follow-on question concerning the effects of the organization on

midshipman orientations. In this case, it was hypothesized that the length of time exposed to the organization's values and the exposure to a greater variety of socialization experiences and role models would result in more realistic and less idealistic orientations. In addition, it was hypothesized that greater commitment to the organization, occurring when midshipmen become upperclass, would result in an increase in pro-military attitudes and role identity salience. To test these hypotheses, differences between academic classes, or cohorts, are investigated on job values, work beliefs, military attitudes, and military role identities. The differences between academic groups are then analyzed graphically to highlight trends in the orientations of midshipmen based on the length of time spent in the organization.

### Job Values

In Table 7.9, ANOVA results are presented for the wave 1 job values of men and women midshipmen by Naval Academy academic class. The percentage of men in the MAS sample is nearly 82%, comparable to the proportion of men in the Brigade of Midshipmen, and the overall means for academic cohorts reflect the sizeable influence of this gender group. The ANOVA results for the men are largely the same as those observed in the overall MAS sample tests and are considered indicative of the orientations for each academic cohort when answering the original research questions. The inclusion of men and women in the ANOVA tables provides a comparison of orientations by gender as well as by academic class.

While use of the ANOVA statistic provides an overall test of group means on the dependent measure, it does not allow a direct comparison to determine which specific differences are statistically significant (Hair et al. 1998). Likewise, conducting multiple

tests of independence for each of the groups increases the statistical analyses considerably and tends to inflate the probability of incurring Type I errors, or concluding that the group means are different, when in fact they are not (Hair et al. 1998). In this analysis, ANOVA results, plus post hoc means comparisons and graphic analysis of means were conducted to assess the orientations of midshipmen by the length of organizational tenure.<sup>35</sup>

In each ANOVA test for the men, the group mean differences are significant among academic cohorts. However, the F-values associated with extrinsic, influence, and leisure job values are smallest, indicating less variability between groups on those measures. The job values scales with the largest F-values are intrinsic, security, and social altruism and indicate that, for men, midshipmen academic groups differ the most on these job values.

The ANOVA results for wave 1 job values scales of women midshipmen indicate that very little difference exists across the group means of all academic classes. The only statistically significant group mean difference exists for extrinsic job values and this is likely affected by an extremely low group mean for the Class of 2005 cohort. The failure to detect group differences in the majority of these tests, however, is also likely the result of smaller group sizes for women.<sup>36</sup>

For influence job values, incoming Plebe men and women value influence higher than any other academic or gender groups and it appears that men and women value decision making and challenging and difficult work less the more time they spend in the

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<sup>35</sup> Tabular output for post hoc comparisons is not included in this results section, but has been retained by the author.

<sup>36</sup> With five groups numbering less than 60 respondents, a statistical power of .80 ( $\alpha = .05$ ) allows only for the detection of medium to large effect sizes (Hair et al. 1998).

organization, although women with the most time in the organization value it the least. While the overall difference between men and women on influence job values is statistically significant (mean difference = .11,  $p = .015$ ), the only statistically significant difference between men and women in an academic cohort is in the Class of 2003, the Graduating Senior group (mean difference = .19,  $p = .025$ ).<sup>37</sup>

A closer examination of all job values scales shows that the mean orientations for both men and the women in the Class of 2007, the Plebe group, differ from the other academic groups of midshipmen in every case except leisure job values. The Plebes value extrinsic, influence, intrinsic, and social altruism characteristics of work higher than midshipmen who have been in the organization longer and they value the security aspects of a job less. For every group of midshipmen, both men and women, the leisure rewards of work are preferred the least. With the exception of one academic cohort, the men show very little difference in leisure values.

The differences in leisure values may be due to the relative position of midshipmen in the organization, where the most senior midshipmen have the greatest amount of free time and are most likely to engage in leisure activities. This difference may also be a function of more senior midshipmen realizing that their obligation to serve in the military may curtail current freedom they have to choose leisure activities, thus they place greater emphasis on these job rewards. In either case, the women midshipmen who have been in the organization longest share more similar leisure job values to their male cohorts.

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<sup>37</sup> In post hoc analysis of the mean difference in job values by gender, a positive difference indicates men hold higher mean values and a negative difference indicates women hold higher mean values. In post hoc analysis of the mean difference in job values by academic cohort, a positive difference indicates the Plebes (Class of 2007) hold higher mean values and a negative difference indicates Graduating Seniors (Class of 2003) hold higher mean values.

**Table 7.9 Analysis of Variance of Job Values Scales by Academic Year and Gender at Wave 1, USNA Midshipmen**

		Academic Year										F <sup>a</sup>
		2007		2006		2005		2004		2003		
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	
Extrinsic												
N	167	32	264	56	254	61	266	45	199	62		
Mean	2.95	3.02	2.85	2.89	2.83	2.53	2.93	2.86	2.78	2.73	2.61* (M)	
SD	0.64	0.63	0.69	0.63	0.67	0.67	0.63	0.55	0.63	0.57	4.57**(W)	
Influence												
N	167	33	266	56	254	61	264	45	198	64		
Mean	3.12	3.08	3.03	2.88	2.93	2.95	3.02	2.87	3.05	2.86	2.58* (M)	
SD	0.59	0.60	0.64	0.52	0.68	0.62	0.62	0.64	0.62	0.57	0.93(W)	
Intrinsic												
N	166	33	266	56	250	61	265	45	199	64		
Mean	3.40	3.36	3.21	3.33	3.20	3.32	3.25	3.26	3.21	3.27	6.45*** (M)	
SD	0.34	0.34	0.46	0.39	0.43	0.44	0.45	0.42	0.50	0.37	0.57(W)	
Leisure												
N	168	33	267	55	249	61	266	44	196	63		
Mean	2.54	2.38	2.54	2.42	2.54	2.41	2.68	2.51	2.56	2.54	2.44* (M)	
SD	0.62	0.70	0.65	0.64	0.65	0.72	0.65	0.56	0.65	0.62	0.56(W)	
Security												
N	168	33	267	56	253	60	265	44	200	64		
Mean	2.60	2.41	2.64	2.64	2.64	2.60	2.83	2.85	2.66	2.71	3.93** (M)	
SD	0.65	0.69	0.73	0.64	0.74	0.71	0.66	0.72	0.71	0.71	2.11(W)	
Social Altruism												
N	168	33	266	56	253	61	268	44	200	63		
Mean	3.25	3.24	3.02	3.11	2.96	3.13	3.02	3.22	3.04	3.17	6.62*** (M)	
SD	0.58	0.54	0.59	0.51	0.65	0.66	0.61	0.59	0.58	0.58	0.42 (W)	

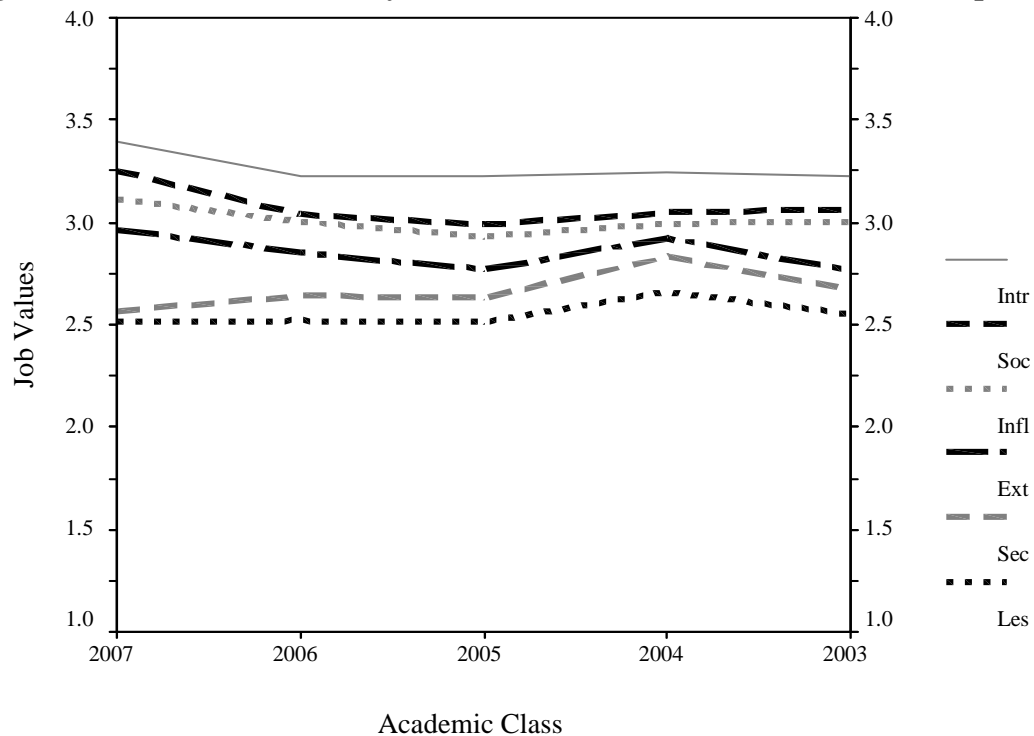
a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$



With the exception of leisure and security job values, the Plebe men and women share more similar orientations as an academic cohort than they share with other groups of men and women who have been in the organization longer. On these job values (extrinsic, influence, intrinsic, social altruism), other academic cohorts appear to exhibit a gender effect between groups of men and women, rather than academic cohorts sharing similar orientations. For example, the social altruism job values of men and women Plebes are nearly identical, while the orientations of other class groups follow along traditional gender lines, with women favoring the social altruism rewards of work more than their male counterparts.

Post hoc graphic comparison of the overall academic group means in Figure 7.1 highlights two patterns in the data. First, for those job values scales in which idealism is represented by higher mean scores (extrinsic, intrinsic, influence, and social altruism), incoming midshipmen score highest and for those job values where lower mean scores represent idealistic views (leisure and security), incoming midshipmen score lowest or second lowest. The group means for Plebes are the extreme (either highest or lowest) for all job values scales except leisure values and the difference in that case is extremely small. In fact, all midshipmen groups rated leisure rewards lowest and the differences between groups are small.

**Figure 7.1 Job Values Scales by Academic Year at Wave 1, USNA Midshipmen**



Previous research has shown that youth prefer leisure job values less than other rewards (Johnson and Elder 2002), but in this case all midshipmen groups hold consistently lower preferences for leisure than civilians, supporting the notion that individuals who hold these orientations self-select to the Academy. Second, when plotted by academic class in Figure 7.1, the group means for each job values scale show general trends from more idealistic orientations of incoming midshipmen to less idealistic, more pragmatic orientations expressed by midshipmen with greater time in the organization.

Post hoc comparison of means for incoming midshipmen and those about to leave the organization (2007 – 2003) identified statistically significant differences in extrinsic (mean difference = .20,  $p = .001$ ), intrinsic (mean difference = .17,  $p < .001$ ), and social altruism (mean difference = .19,  $p = .001$ ) job values scales. Post hoc comparison of means for incoming and exiting women midshipmen (2007 – 2003) shows larger group

differences than the Plebe and Graduating Senior men on extrinsic, influence, leisure, and security job values, and smaller differences on intrinsic and social altruism job values. The only mean differences that are statistically significant for the women are extrinsic (mean difference = .30,  $p = .023$ ) and security (mean difference = -.30,  $p = .048$ ) job values scales, while influence job values are significant at the  $p \leq .10$  level (mean difference = .22,  $p = .087$ ).

Although the tests between Plebes and Graduating Seniors were not conducted on the same academic cohort, for those job values that can be argued to have a closer association with military work (higher influence, lower leisure, and lower security), the differences between incoming and exiting men are not statistically significant. These comparisons support the argument that midshipmen who express these orientations are self-selected to the Academy and change little over the four years they live, learn, and train there. For Plebe and Graduating Senior women, however, influence job values are similar to men as they enter the organization, but differ significantly as they are about to graduate. In the case of the Class of 2004, there appears to be a cohort effect for several of the job values scales that modify the observed trends. This group of midshipmen prefers more pay and benefits, free time, and job security than the other academic cohorts. The midshipman sample was drawn in a manner that represents the Brigade on most characteristics so sampling error cannot reasonably be used to explain the anomaly.

The last test of group differences in job values scales is for midshipmen categorized as members of a minority group. In Table 7.10, wave 1 group differences in non-minority, or white midshipmen and minority midshipmen are presented. For non-minority midshipmen, the greatest group differences exist on intrinsic and security job

values, while the smallest difference is on the influence rewards of work. For minority midshipmen, the greatest differences are on extrinsic and security job values, while the least variation between groups is observed on the intrinsic characteristics of work. The results for minority midshipmen are also affected by the small group sizes, but as before, the group means for incoming minority midshipmen are highest for the four job values scales where higher scores indicate greater idealism (extrinsic, influence, intrinsic, and social altruism) and second lowest for job values scales where lower scores indicate idealism. In fact, in nearly every case the group means for minority midshipmen are higher than the group means for non-minorities.

**Table 7.10 Analysis of Variance of Job Values by Academic Year and Minority Status at Wave 1, USNA Midshipmen**

		Academic Year										F <sup>a</sup>
		2007		2006		2005		2004		2003		
		White	Minority	White	Minority	White	Minority	White	Minority	White	Minority	
Extrinsic												
N	151	48	252	68	249	66	256	55	211	50		
Mean	2.88	3.24	2.83	2.93	2.73	2.92	2.90	3.03	2.72	2.97	3.62**	(White)
SD	0.63	0.57	0.68	0.69	0.68	0.63	0.62	0.58	0.63	0.51	2.43*	(Minority)
Influence												
N	151	49	254	68	249	66	254	55	212	50		
Mean	3.10	3.16	2.99	3.06	2.94	2.90	3.00	2.95	3.02	2.94	1.53	(White)
SD	0.60	0.57	0.62	0.61	0.69	0.55	0.61	0.70	0.62	0.61	1.67	(Minority)
Intrinsic												
N	152	47	254	68	246	65	255	55	213	50		
Mean	3.40	3.38	3.20	3.33	3.20	3.32	3.24	3.31	3.21	3.29	5.97***	(White)
SD	0.35	0.32	0.46	0.42	0.45	0.37	0.45	0.42	0.50	0.35	0.39	(Minority)
Leisure												
N	152	49	254	68	245	65	256	54	211	48		
Mean	2.47	2.66	2.50	2.60	2.45	2.76	2.64	2.76	2.53	2.67	3.17*	(White)
SD	0.63	0.63	0.62	0.74	0.67	0.58	0.64	0.62	0.66	0.54	0.82	(Minority)
Security												
N	153	48	255	68	247	66	255	54	214	50		
Mean	2.53	2.68	2.64	2.67	2.55	2.92	2.80	2.95	2.64	2.84	5.39***	(White)
SD	0.69	0.57	0.71	0.74	0.73	0.69	0.65	0.71	0.72	0.63	2.29	(Minority)
Social Altruism												
N	152	49	254	68	248	66	258	54	213	50		
Mean	3.22	3.36	3.00	3.19	2.97	3.07	3.02	3.18	3.05	3.12	4.42**	(White)
SD	0.57	0.57	0.60	0.48	0.67	0.61	0.61	0.60	0.61	0.46	2.15	(Minority)

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

Post hoc comparison of means for incoming and exiting minority midshipmen (2007 – 2003) at wave 1 show larger mean differences than those observed between Plebe and Graduating Senior non-minority midshipmen on extrinsic, influence, security, and social altruism job values scales. In this series of post hoc means comparisons, however, the only statistically significant differences between incoming and exiting minority midshipmen occur in extrinsic (mean difference = .27,  $p = .015$ ) and social altruism (mean difference = .24,  $p = .022$ ) job values. These findings raise the question of whether it is appropriate to only categorize the orientations of incoming minority midshipmen as idealistic. While minority job values decrease and increase in similar patterns to those observed in the non-minority midshipmen, there appears to be an interaction effect for their minority status that results in higher job values overall. Whereas gender did not appear to affect the orientations of incoming midshipmen greatly, there appears to be a larger minority group effect for several of the job values scales.

#### Work Beliefs

The results of ANOVA testing for the difference of means in wave 1 work beliefs by academic class and by gender and minority group status are in Table 7.11. In this table, statistically significant academic year differences emerge in the comparison of male midshipmen and for the comparison of minority midshipmen. In a similar manner to job values scales, incoming midshipmen appear to hold more idealistic work beliefs and feel that work will be more central and important to them than any other academic, gender, or minority group. There is no significant difference in the work beliefs of incoming midshipmen by gender or minority group status.

The weakest mean work beliefs of any group in Table 7.11 are found among male First Class midshipmen in the Class of 2004. For the Graduating Seniors in the Class of 2003 there is little difference in the work beliefs of men and women and between minorities and non-minority group midshipmen. The two groups of midshipmen closest to leaving the organization hold the weakest work beliefs of any of the five academic cohorts. There may be an association between the higher leisure and security job values held by First Class midshipmen and the weaker work beliefs held by this same group. When this wave of the MAS was collected in April of 2003, these midshipmen were completing their third and typically most difficult year of academic work because of the focus on engineering core courses across the curriculum at this stage. The value placed on more free time and less supervision as well as the belief that their work will be less important to them may be due to a general fatigue from the rigors of three years in residence at the Academy. The fact that the work beliefs of women in the Class of 2004 are not as low as the men and the work beliefs of different groups of Graduating Seniors are very similar points to a gender effect that explains differences in orientations for earlier academic cohorts and more realistic work beliefs as all midshipmen get closer to graduation. Like the men, women midshipmen appear to adopt realistic work beliefs (or abandon their idealistic beliefs) in a similar, but more gradual manner.

**Table 7.11 Analysis of Variance of Work Beliefs Scale by Academic Year, Gender, and Minority Status at Wave 1, USNA Midshipmen**

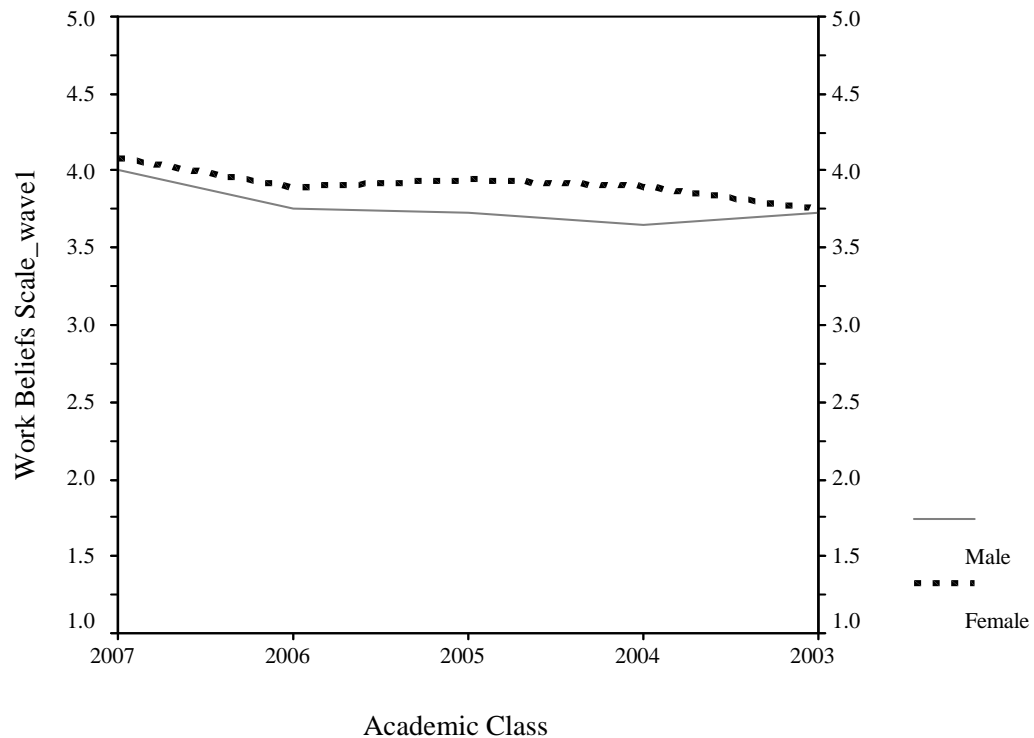
		Academic Year					F <sup>a</sup>
		2007	2006	2005	2004	2003	
Work Beliefs wave 1							
(Men)	N	168	265	251	268	200	7.32***
	Mean	4.00	3.76	3.73	3.65	3.73	
	SD	0.62	0.70	0.69	0.69	0.68	
Work Beliefs wave 1							
(Women)	N	33	55	61	45	63	1.39
	Mean	4.08	3.90	3.94	3.90	3.75	
	SD	0.65	0.67	0.77	0.62	0.68	
Work Beliefs wave 1							
(Non-Minority/White)	N	153	253	246	258	214	5.54***
	Mean	4.01	3.79	3.78	3.69	3.75	
	SD	0.64	0.72	0.73	0.67	0.69	
Work Beliefs wave 1							
(Minority)	N	48	67	66	55	49	2.47*
	Mean	4.02	3.75	3.72	3.67	3.69	
	SD	0.58	0.61	0.62	0.77	0.61	

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

Post hoc graphic comparisons of midshipmen work beliefs presented in Figures 7.2 and 7.3 show incoming midshipmen expressing the strongest mean work beliefs and thereafter a declining trend in work beliefs for all comparison groups whether by gender or by minority status. Post hoc tests of the mean differences in work beliefs between Plebes and Graduating Seniors (2007 – 2003) are statistically significant for the men (mean difference = .27,  $p < .001$ ), women midshipmen (mean difference = .33,  $p = .023$ ), and for minority midshipmen (mean difference = .33,  $p = .007$ ).



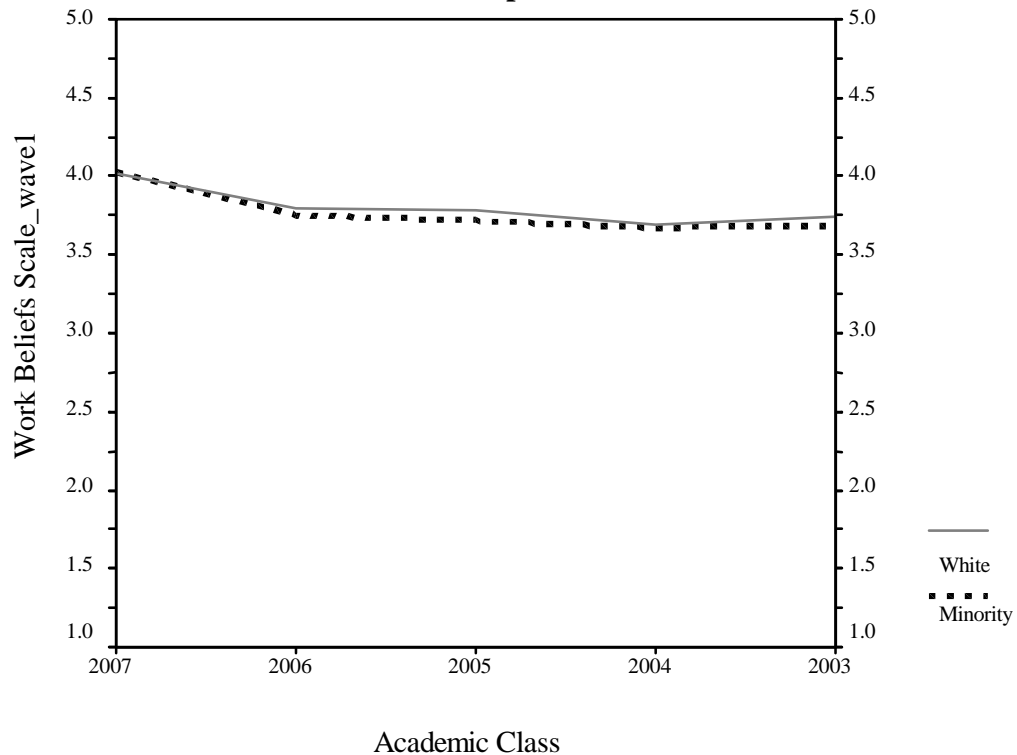
**Figure 7.2 Work Beliefs by Academic Class and Gender at Wave 1, USNA Midshipmen**



In Figure 7.2, the differences by gender are depicted by a convergence in the beliefs of men and women at the beginning, or entry to the organization, and at the end, or departure, from the organization. Statistically significant gender differences in midshipmen are observed the in Second Class (2005) (mean difference =  $-.22$ ,  $p = .031$ ) and First Class (2004) (mean difference =  $-.25$ ,  $p = .025$ ) academic groups.

In Figure 7.3, a similar trend from stronger to weaker work beliefs is observed for minority midshipmen, but little to no difference exists in the orientations of minority and non-minority midshipmen. This is likely a function of minority work beliefs being more similar to non-minority beliefs rather than an artifact of the influence of male gender effects because the percentage of minority women (24.2%) in the MAS is greater than the percentage of minority men (19.6%).

**Figure 7.3 Work Beliefs by Academic Class and Minority Status at Wave 1, USNA Midshipmen**



While there are likely gender differences in the work beliefs of men and women in this sample, the areas of convergence may indicate anticipatory socialization by each academic year group to the dramatic changes they are facing. The Plebes are facing entry to the Brigade of Midshipmen, dominated by images of hard work and self-sacrifice to the organization, as well as an uncertainty as to whether they will ultimately succeed. The Graduating Seniors have endured the hardships and restrictions of Academy life and have accomplished a significant milestone as midshipmen. The Graduating Seniors now face a different uncertainty in their new roles as junior officers, but in their tenure at the Academy they have learned a great deal about themselves and about life in general and, therefore, as a group they are perhaps tempering their orientations as they approach this new unknown.

### Military Attitudes

Table 7.12 presents ANOVA testing for wave 1 mean attitudes about the military by increasing time in the organization. In this table, attitudes concerning the military as a place to work and an evaluation of the opportunities available to individuals in the military are considered. On average, all midshipmen view the military as an acceptable place to work. However, incoming midshipmen, regardless of gender or minority status, view the military as a more acceptable place to work than those who have been in the organization longer do. Likewise, while all midshipmen on average believe opportunities are available “to some extent” in the military, the mean for incoming midshipmen is greater than for those midshipmen who have been in the organization longer. For minority midshipmen, however, the differences between groups on the military opportunity scale are not statistically significant.

Post hoc means comparisons of the military attitudes for incoming and exiting midshipmen by gender were conducted and unlike job values and work beliefs, incoming men and women are not monolithic in their attitudes about the military. While there is no significant difference in the military attitudes of men and women entering the organization, for midshipmen getting ready to exit the organization, men expressed significantly higher mean scores than the women for views about military opportunity (mean difference = .24,  $p = .022$ ).

**Table 7.12 Analysis of Variance of Military Attitudes by Academic Year, Gender, and Minority Status at Wave 1, USNA Midshipmen**

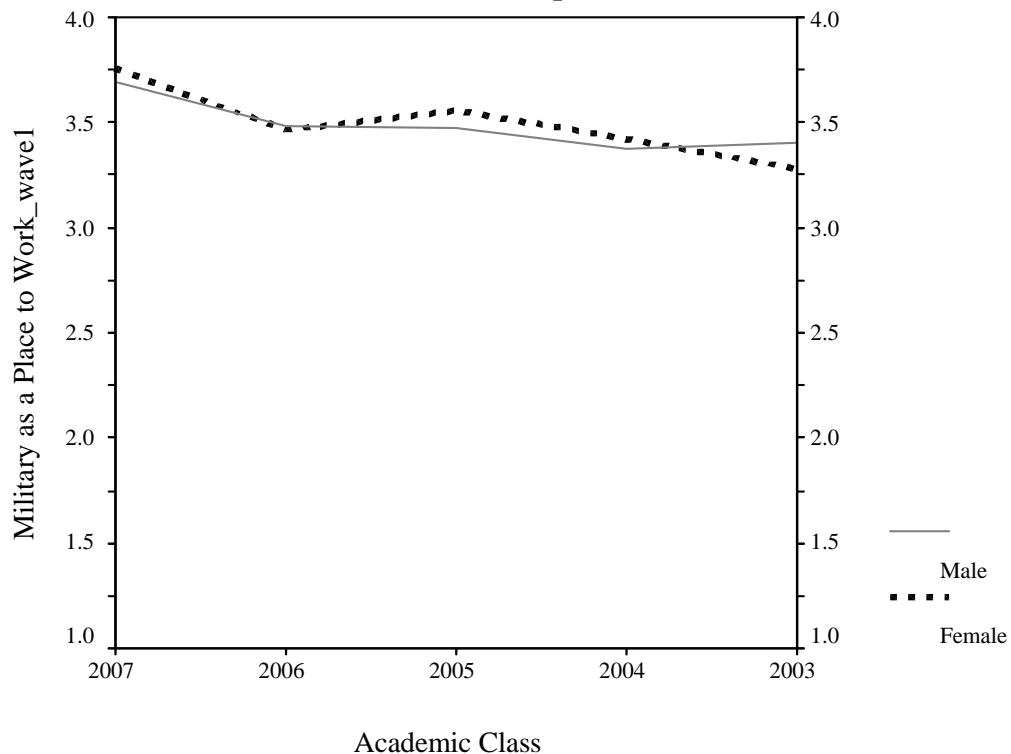
		Academic Year					
		2007	2006	2005	2004	2003	F <sup>a</sup>
Military as a Place to Work wave 1							
(Men)	N	167	267	253	269	199	
	Mean	3.69	3.49	3.47	3.38	3.40	7.01***
	SD	0.55	0.68	0.60	0.69	0.67	
Military as a Place to Work wave 1							
(Women)	N	33	56	61	45	64	
	Mean	3.76	3.46	3.56	3.42	3.28	3.90**
	SD	0.44	0.57	0.53	0.81	0.58	
Military as a Place to Work wave 1							
(Non-Minority/White)	N	152	255	248	259	213	
	Mean	3.70	3.50	3.48	3.40	3.36	7.53***
	SD	0.55	0.68	0.60	0.68	0.66	
Military as a Place to Work wave 1							
(Minority)	N	48	68	66	55	50	
	Mean	3.71	3.43	3.50	3.31	3.42	2.89*
	SD	0.46	0.61	0.53	0.86	0.57	
Military Opportunity Scale wave 1							
(Men)	N	166	261	252	264	199	
	Mean	3.93	3.73	3.67	3.69	3.78	4.48***
	SD	0.58	0.71	0.68	0.65	0.71	
Military Opportunity Scale wave 1							
(Women)	N	32	55	61	44	62	
	Mean	4.07	3.48	3.71	3.60	3.54	5.20***
	SD	0.65	0.58	0.62	0.62	0.69	
Military Opportunity Scale wave 1							
(Non-Minority/White)	N	149	249	247	254	213	
	Mean	3.96	3.70	3.70	3.67	3.74	5.30***
	SD	0.55	0.70	0.68	0.64	0.72	
Military Opportunity Scale wave 1							
(Minority)	N	49	67	66	54	48	
	Mean	3.93	3.65	3.60	3.72	3.66	1.85
	SD	0.72	0.67	0.63	0.68	0.69	

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

Figures 7.4 and 7.5 provide graphic post hoc analysis of the mean differences in military attitudes by gender. The graphic trends for minority midshipmen are not depicted, but are quite similar to the trends observed for men in the Brigade, which is a

function of the overrepresentation of males among minority and non-minority midshipmen. In Figure 7.4, incoming women midshipmen express the highest mean ratings of the military as a workplace, but the mean for women closest to graduation from the Naval Academy is rated lowest.

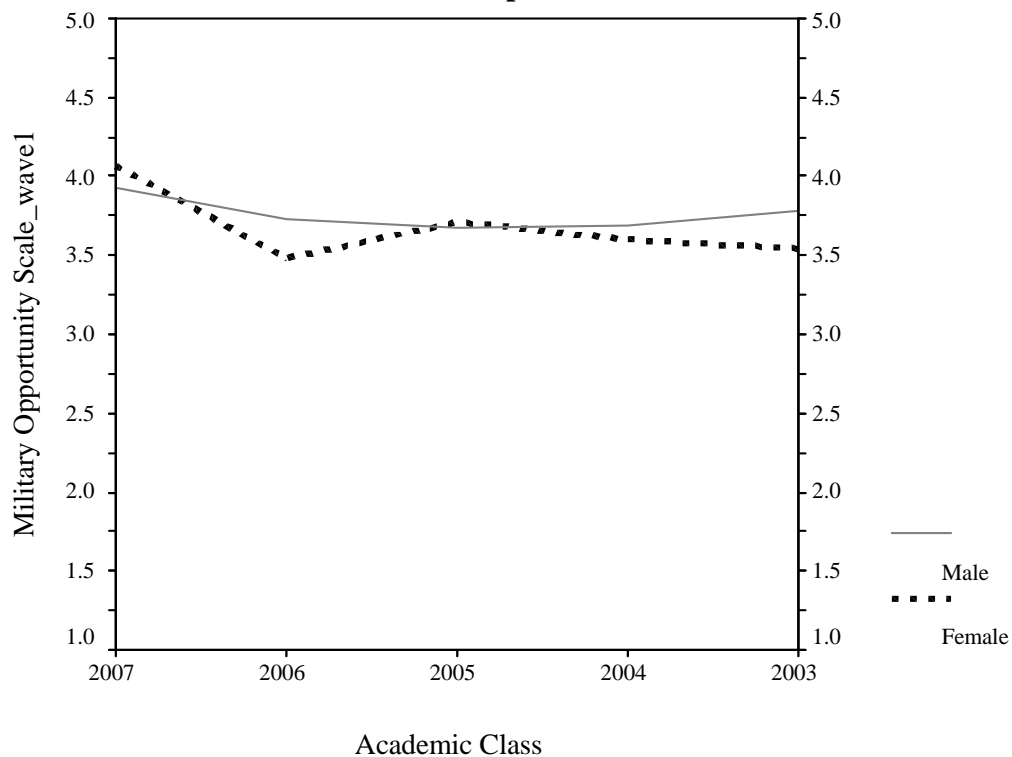
**Figure 7.4 Military as a Place to Work by Academic Class and Gender at Wave 1, USNA Midshipmen**



The graphic display of workplace attitudes for men appears to drop from the initial high of incoming midshipmen and then level off for groups of more senior midshipmen. Likewise, the mean ratings of military opportunity are greatest for incoming women midshipmen and differ significantly from those women closest to leaving the organization. However, the trend line for women does not appear to level off, but continues downward by academic cohort.

The graphic comparison of the military opportunity scale in Figure 7.5 shows a similar pattern to that observed in the attitudes about military work. Again, incoming women express the most positive views about military opportunity, while women about to leave the organization express some of the least positive orientations. Likewise, the trend line for men appears to show an increase as they near the transition to military work, while the attitudes of women closer to military work decrease.

**Figure 7.5 Military Opportunity by Academic Class and Gender at Wave 1, USNA Midshipmen**



While the attitudes of midshipmen toward military work and opportunities are generally positive, the familiar trend of overly idealistic orientations for newcomers to the organization was observed again. The major difference observed in the patterns of military attitudes is a stabilizing or slight upturn of military attitudes after an initial drop for groups of men who have been in the organization the longest. For women, there appears to be both an effect on orientations by time in the organization and for gender,

but the effect is downward in both cases. It may be that as men spend more time in the organization, they are exposed to more military work environments and observe officer role models that enable them to see this future work role and the opportunities available in a positive light. For women midshipmen, the opposite may occur as they see fewer female role models than their male peers and limited opportunities for women in the larger military organization.

#### Summary of Results: Research Question Two

The analyses in this section addressed the influence of prior experiences and orientations, as well as the length of time spent in the organization on the orientations of different groups of midshipmen. Clearly, the impact of prior socialization experiences and orientations is present in the job values, work beliefs, military attitudes, role identities, and military career plans of Plebes. Parental background characteristics were associated with influence job values, work beliefs, and attitudes about the military, while prep school, military service, and Summer Seminar attendance were the only prior military experience variables associated with Plebe orientations.

Using the prior experiences and orientations model, military role identity salience and career expectations were predicted from social structural and family background characteristics, and orientations upon organizational entry. Attending the Naval Academy Summer Seminar, having prior military service and being the child of a military parent all helped predict military role identity salience. Rather than being multiple indicators of military role identity, the identity salience measures were found to be largely independent role identities. The midshipman role identity appears to be largely a function of anticipatory socialization to the new role, while the service identity is a

result of prior enlisted military experiences. Leader identity is influenced by a socialization experience (Summer Seminar), but also by individual work beliefs. Finally, the officer role identity in Plebes is influenced by two socialization experiences (Summer Seminar and military parent) but is the weakest prediction of the four identity models.

The conflicting relationships observed in these models are likely the result of different meanings attached to each of the role identities, as well as the relationship identities have with the environmental context in which newcomers find themselves. Because of its future orientation, the officer identity is the best role identity predictor of military career expectations, but is least explained by prior experiences and orientations. However, the strongest single predictor of military career propensity at entry and, thus, better “fit” is the acceptability of the military as a place to work, validating and extending previous research on youth propensity to join the military (Bachman et al. 1998). Likewise, the value of military service is an important predictor of career plans. These findings highlight the fact that Plebes whose orientations are more similar to the organization’s, be they by prior socialization, organizational selection, or by anticipatory socialization, believe military work is important, express more positive views of the military as a work place, and see themselves as a future military officer rather than as a midshipman. This set of orientations displays the greatest organizational “fit” and results in the strongest expectations for a military career.

The tenure or time spent in the organization also appears to influence the orientations of Naval Academy midshipmen, but not entirely in the directions hypothesized. Plebes generally express the most idealistic orientations regardless of gender or minority status, while the job values and work beliefs of midshipmen who have



been in the organization longest are lower or more realistic than newcomers to the organization. The military attitudes of upperclass midshipmen are not more pro-military than those of underclass midshipmen as hypothesized. However, the attitudes of male midshipmen do appear to stabilize as they ready themselves for military work, while the military attitudes of women seem to continue on a downward trend.

Finally, the orientations of incoming women and minority midshipmen are as idealistic, strong, and pro-military as their male and majority Plebe counterparts. These midshipmen appear to exhibit similar self-selection and anticipatory socialization effects that produce convergent orientations upon entry to the organization. Other midshipmen academic classes do not exhibit the same uniformity in orientations by gender and minority group. While the orientations of more senior midshipmen tend towards greater realism and in most cases stabilize, the orientations of women midshipmen exiting the organization tend to be the least positive toward their future work as military officers.

These analyses have demonstrated that prior experiences and orientations, as well as duration in the organization influence the orientations of Naval Academy midshipmen. Whether or not organizational socialization and college experiences are the cause of these trends or normal maturation and development is not known at this point, but the trend for upperclass midshipmen job values and work beliefs is similar to that reported in research on civilian youth in transition to adulthood (Johnson and Elder 2002; Johnson 2001). The research by Johnson and colleagues (2001; 2002) found that change was a function of both cohort shifts in orientations (development) and the educational trajectories of individuals (organizations). That is perhaps the case with the orientations of midshipmen as well.

## **Chapter 8 Socialization Tactics and Structural Position**

The third research question in this study addresses the influence of differing forms of professional summer training and the assumption of new and different structural positions, or roles in the organization, on the orientations of Naval Academy midshipmen. A longitudinal design assessed the differences in job values, work beliefs, military role identities, and military career plans of midshipmen from wave 1 to wave 2 to test the effects of plebe summer and other forms of summer professional training for different academic year groups and demographic categories.

The first hypothesis associated with this question proposed that the intense socialization process of plebe summer indoctrination would result in greater mean differences from wave 1 to wave 2 in the orientations of incoming midshipmen than for those midshipmen undergoing less structured and more diverse summer training programs. Related to this, it was also hypothesized that, because of the immersion of newcomers to a new role in a near “total institution” environment, midshipman role identity would become more salient to Plebes from wave 1 to wave 2 and would increase more than other military identities. Second, it was hypothesized that the salience of other military role identities would be higher for upperclass midshipmen at wave 2 because they have been exposed to a greater amount and diversity of training experiences and role models in leadership, military officer, and service roles. In addition, they have committed themselves to finishing their education at the Naval Academy and assuming new roles as leaders in the Brigade of Midshipmen and as Navy and Marine Corps officers upon graduation. Finally, it was hypothesized that the structured, formal, and serial nature of initial plebe summer indoctrination would result in less variation in the

orientations of incoming midshipmen from wave 1 to wave 2 than for other midshipmen completing less structured and more diverse summer training programs.

One potential problem associated with a longitudinal research design such as this is the possibility that changes observed in the group means from one point in time to the next might be influenced by a statistical artifact known as “regression to the mean”. This artifact is a function of the random error between observed scores and the true score on a measure (Hair et al. 1998). The result is that repeated observations of the same measure will tend towards the true mean, thus presenting what appears to be statistical change. In this case, such change would be incorrectly attributed to the effects of organizational socialization. Two factors are included to assist in the interpretation of the wave 1-2 data presented in this chapter and minimize the effects of “regression to the mean”. First, in Chapter 5 the wave 1-2 standardized alphas for each of the constructed scales were robust, indicating the measures were internally consistent among respondents over time. Second, the analysis of cross-sectional data in Chapter 7 highlighted a general trend towards greater realism for groups with more time in the organization and similar trends have been observed in previous research in the job values of youth (Johnson 2001; Johnson 2002; Johnson and Elder 2002). Thus, while wave 1-2 change might be influenced by “regression to the mean”, changes that reinforce previously observed cross-sectional trends among valid measures may, in fact, be the result of real changes in the orientations of midshipmen.

#### Differences in Job Values and Work Beliefs over Time

Change from wave 1 to wave 2 on job values and work beliefs for each of the academic year groups is presented in Table 8.1. For midshipmen in the Classes of 2006-

2003, wave 1 data were collected at the Naval Academy in April 2003, just before the final exam period. For the Plebes, wave 1 data was collected in July 2003, during their first week at the Academy. Wave 2 data for all respondents were collected in September and October 2003 after the new academic term had begun. For respondents to both waves of the MAS, the panel design covers the period of summer professional training between academic terms as well as the first 6 weeks of the new academic term.

The results in the previous section indicated that incoming midshipmen expressed more idealistic job values and work beliefs than other midshipmen in the organization. After summer training is complete, Table 8.1 shows that incoming midshipmen (Class of 2007) continue to hold the most idealistic orientations and the Plebes experience the fewest statistically significant changes in orientations during the summer training period. For extrinsic, influence, intrinsic, and social altruism job values, the Plebe group mean is higher and more idealistic than all other academic groups and their group means for leisure and security job values are lowest. The work beliefs of Plebes are unchanged from wave 1 to wave 2. The observed changes in the work beliefs of other midshipmen academic classes are rather small and only significant for one class.

For the other year groups tested, midshipmen orientations between wave 1 and wave 2 decline on every scale, though many of the changes are not significant. The Plebes experience the greatest group changes in the influence, intrinsic, and leisure aspects of work from wave 1 to wave 2, but the changes all occur in the downward direction, rather than upward as hypothesized. Because of the stressful and challenging experiences of plebe summer, this group of midshipmen probably worked harder than ever before and now, as they see the long road to graduation ahead, they may value the

influence aspects of work less. Conversely, newcomers to the organization have assumed the Plebe role of follower and may not view themselves in a decision-making or influential role at this stage. The largest wave 1-2 differences for the Plebes were observed in leisure job values and may result from their realization of the low position they hold in the organization and the lack of freedom associated with it. Perhaps because of their negative evaluation of the situation, they adjust their orientations downward.

At wave 2, First Class (2004) midshipmen are now in positions of leadership and responsibility in the Brigade and have spent the greatest amount of time in the organization. It was expected that this group would experience less change in orientations from wave 1 to wave 2. Actually, this group experienced the largest mean change in extrinsic job values (mean difference = .16,  $t = 5.48^{***}$ ) and security (mean difference = .14,  $t = 3.39^{***}$ ) job values and First Class midshipmen ranked leisure and security higher than other academic classes. Unlike the pattern observed for this group in the wave 1 orientations of midshipmen (see Figure 7.1), the extrinsic, security, and leisure job values of the Class of 2004 are now more similar to the orientations of Third Class and Second Class midshipmen. The patterns for extrinsic, leisure, and security job values for the Class of 2004 may be a cohort effect associated with their former structural position or some aspect of the Academy environment. If similar peaks in other academic classes were observed at this point, it would provide confirmation of a process or environmental effect.

Post hoc analysis of the Third, Second, and First Class groups shows very little difference in the wave 2 orientations between these groups. In fact, the only significant difference in orientations among these groups is observed in their work beliefs

( $F = 4.22^*$ ). A comparison of the wave 2 means for Plebes (2007) and First Class midshipmen (2004) highlights an even larger number of statistically significant group differences than observed between Plebes and the Graduating Seniors at wave 1.<sup>38</sup> In addition, the mean work beliefs of Plebes at wave 2 are higher than the means for other midshipmen groups and the post hoc comparison of Plebe and First Class work beliefs (2007 – 2004) at wave 2 the difference is large and statistically significant (mean difference = .34,  $p < .001$ ).

Other patterns observed in the data show that when change from wave 1 to wave 2 is statistically significant for incoming (Class of 2007) midshipmen (intrinsic, influence, and leisure job values) the wave 1-2 change is also significant for midshipmen who completed Plebe year at wave 1 and transitioned to Third Class year at wave 2 (Class of 2006). For intrinsic job values, the wave 1-2 difference is statistically significant in all four academic comparison groups, while on extrinsic job values the three upperclass groups exhibit statistically significant differences in wave 1-2 means while incoming midshipmen do not.

Thus, while the Plebe group is still very different from other midshipmen groups at wave 2, it appears the two junior groups (Plebe and Third Class) exhibit common changes in several of their work orientations. Likewise, for all of the academic classes, a significant decrease in the intrinsic aspects of work occurs, while the least amount of change across all academic classes occurs in their work beliefs and social altruism job values. Changes in work orientations that would reflect a greater commitment to the

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<sup>38</sup> Statistically significant differences in Plebe and First Class orientations were observed on extrinsic (mean difference = .18,  $p = .007$ ), influence (mean difference = .12,  $p = .05$ ), intrinsic (mean difference = .11,  $p = .012$ ), leisure (mean difference = -.19,  $p = .006$ ), and security (mean difference = -.15,  $p = .050$ ) job values as well as for work beliefs (mean difference = .34,  $p < .001$ ).

organization (higher influence and stronger work beliefs) do not appear in the overall sample of midshipmen with a military service obligation at wave 2 (2005 and 2004).

**Table 8.1 Paired Differences of Means for Job Values and Work Beliefs Scales by Academic Year at Wave 1 and Wave 2, USNA Midshipmen**

		Academic Year <sup>a</sup>			
		2007	2006	2005	2004
Extrinsic Job Values Scale	N	122	283	272	277
	Mean_1	2.95	2.85	2.78	2.91
	Mean_2	2.94	2.74	2.66	2.75
	Difference	0.01	0.11	0.12	0.16
	SD	0.47	0.56	0.48	0.48
	t	0.29	3.24***	4.10***	5.48***
Influence Job Values Scale	N	121	285	272	276
	Mean_1	3.17	3.03	2.94	2.99
	Mean_2	3.07	2.91	2.91	2.94
	Difference	0.10	0.11	0.03	0.05
	SD	0.57	0.62	0.58	0.60
	t	2.01*	3.24***	0.89	1.47
Intrinsic Job Values Scale	N	122	285	267	275
	Mean_1	3.40	3.25	3.22	3.26
	Mean_2	3.30	3.18	3.16	3.19
	Difference	0.10	0.07	0.06	0.07
	SD	0.39	0.46	0.43	0.46
	t	2.77**	2.43**	2.09*	2.34*
Leisure Job Values Scale	N	123	285	267	274
	Mean_1	2.50	2.52	2.52	2.64
	Mean_2	2.38	2.46	2.51	2.58
	Difference	0.12	0.06	0.01	0.06
	SD	0.53	0.52	0.54	0.56
	t	2.48*	1.97*	0.34	1.91
Security Job Values Scale	N	123	283	270	274
	Mean_1	2.56	2.63	2.64	2.83
	Mean_2	2.55	2.61	2.59	2.69
	Difference	0.01	0.02	0.05	0.14
	SD	0.63	0.66	0.67	0.68
	t	0.22	0.59	1.14	3.39***
Social Altruism Job Values Scale	N	122	282	269	276
	Mean_1	3.20	3.04	2.99	3.06
	Mean_2	3.15	3.00	2.92	3.04
	Difference	0.05	0.04	0.07	0.02
	SD	0.51	0.59	0.50	0.52
	t	1.07	1.26	2.25*	0.75
Work Beliefs Scale	N	122	279	265	277
	Mean_1	3.99	3.80	3.77	3.70
	Mean_2	3.99	3.79	3.68	3.64
	Difference	0.00	0.01	0.09	0.06
	SD	0.53	0.59	0.58	0.62
	t	0.04	0.05	2.50*	1.85

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 8.2, the wave 1-2 differences in mean job values and work beliefs of midshipmen by gender and minority status are presented. From wave 1 to wave 2, the orientations of all midshipmen groups decline except for women's preferences for social altruism aspects of work. The lack of significant change for women midshipmen on social altruism job values conforms to previous research that identified gender differences in this area (Johnson 2001; Marini et al. 1996). The only significant wave 1-2 change in the orientations of women occurs for extrinsic job values. Even at the  $p \leq .10$  level the only other significant wave 1-2 difference for women midshipmen occurs in work beliefs (mean difference = .07,  $p = .080$ ).

A similar pattern of differences from wave 1 to wave 2 is observed for midshipmen from minority groups. The mean job values and work beliefs of minority midshipmen decline from wave 1 to wave 2 for all measures, however, the difference is again only significant for extrinsic job values. At the  $p \leq .10$  level, the decreases in influence job values (mean difference = .08,  $p = .060$ ) and security job values (mean difference = .07,  $p = .098$ ) of minority group midshipmen are significant. It is possible that significant decreases in extrinsic job values occur as midshipmen realize military pay and benefits, while reasonable, will never make them rich, nor will the advancement system ever rocket them to the top of the organization. However, minority midshipmen rate the extrinsic rewards of work higher than other groups of midshipmen, which might reflect different social status and backgrounds and a desire to improve their lives over those of their parents.



**Table 8.2 Paired Differences of Means for Job Values and Work Beliefs Scales by Gender and Minority Status at Wave 1 and Wave 2, USNA Midshipmen**

		Gender/Minority Group <sup>a</sup>			
		Men	Women	Caucasian	Minority
Extrinsic Job Values Scale	N	789	165	766	188
	Mean_1	2.87	2.80	2.83	3.00
	Mean_2	2.76	2.67	2.72	2.85
	Difference	0.11	0.13	0.11	0.15
	SD	0.51	0.46	0.52	0.44
	t	6.07***	3.52***	5.65***	4.52***
Influence Job Values Scale	N	789	165	764	190
	Mean_1	3.03	2.92	3.01	3.04
	Mean_2	2.96	2.86	2.94	2.96
	Difference	0.08	0.06	0.07	0.08
	SD	0.61	0.55	0.61	0.56
	t	3.53***	1.34	3.28***	1.89
Intrinsic Job Values Scale	N	784	165	763	186
	Mean_1	3.25	3.31	3.24	3.34
	Mean_2	3.17	3.27	3.16	3.32
	Difference	0.07	0.04	0.08	0.02
	SD	0.46	0.37	0.45	0.40
	t	4.48***	1.26	4.76***	0.68
Leisure Job Values Scale	N	787	162	761	188
	Mean_1	2.57	2.44	2.52	2.70
	Mean_2	2.51	2.42	2.45	2.68
	Difference	0.06	0.02	0.07	0.02
	SD	0.55	0.47	0.54	0.51
	t	3.24***	0.42	3.30***	0.43
Security Job Values Scale	N	787	163	765	185
	Mean_1	2.69	2.66	2.65	2.82
	Mean_2	2.63	2.59	2.59	2.75
	Difference	0.06	0.07	0.06	0.07
	SD	0.68	0.60	0.68	0.62
	t	2.48*	1.49	2.38*	1.66
Social Altruism Job Values Scale	N	785	164	762	187
	Mean_1	3.03	3.15	3.02	3.20
	Mean_2	2.98	3.17	2.89	3.14
	Difference	0.06	-0.02	0.04	0.06
	SD	0.56	0.42	0.54	0.50
	t	2.94**	-0.42	2.27*	1.38
Work Beliefs Scale	N	781	162	760	183
	Mean_1	3.76	3.90	3.80	3.75
	Mean_2	3.72	3.83	3.76	3.68
	Difference	0.04	0.07	0.04	0.07
	SD	0.60	0.55	0.59	0.57
	t	1.84	1.76	1.89	1.55

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In post hoc comparison of wave 2 means, significant differences were observed in the intrinsic (mean difference = -.10,  $p = .01$ ) and social altruism (mean difference = -.19,

$p < .001$ ) job values of men and women midshipmen. The differences between men and women on these two job values were greater at wave 2 than they were at wave 1.<sup>39</sup> On the other hand, significant differences that were observed in the influence and leisure job values and work beliefs of men and women at wave 1 were no longer present at wave 2. At both wave 1 and wave 2, non-minority and minority status midshipmen differ significantly on extrinsic, intrinsic, leisure, security, and social altruism job values. However, only the differences between non-minority and minority midshipmen on intrinsic and leisure job values actually increase from wave 1 to wave 2.

The work orientations of all midshipmen, regardless of academic class or category, decline from wave 1 to wave 2, although midshipmen with the least time in the organization still exhibit the most idealistic orientations from wave 1 to wave 2 and, with the exception of intrinsic and leisure job values, change the least over the same period of time. Thus, the intense period of initial socialization to the organization during plebe summer does not appear to cause newcomers to hold more idealistic job values and cause work to be more central and important. Plebes do change the most on several work orientations, but not in the hypothesized direction of greater congruity with organizational values and on other orientations such as extrinsic and intrinsic job values, other midshipmen groups change more than Plebes.

The hypothesized effect from research question two of a greater number and diversity of experiences contributing to more realistic work orientations is observed in this test of change over time. With relatively few exceptions, the orientations of all midshipmen groups are lower and vary less at wave 2 than at wave 1. However, no specific patterns of change or stability emerge in the data that demonstrate an

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<sup>39</sup> Wave 1 job values differences were tested for those midshipmen who responded to both waves 1 and 2.

organizational effect on the work orientations of midshipmen. Whether or not the type and number of summer training experiences and the time in the organization affect what midshipmen value in a job and how important work is for them is not apparent from this investigation.

#### Differences in Military Identity Salience and Career Orientations over Time

During plebe summer, newcomers assume the role of midshipmen and undergo intense training and socialization to Naval Academy culture. Table 8.3 provides the results of means testing from wave 1 to wave 2 for each of the four military role identities included in the MAS. While the mean midshipman identity salience of Plebes increased from wave 1 to wave 2, the mean salience of officer role identity increased more over the same period. However, none of the changes in mean identity salience over time differed significantly for this cohort of Plebes, even at the  $p \leq .10$  level. The lack statistical significance is partly a function of sample size and related to the forced choice construction of the role identity question discussed previously.

From the analysis of prior experiences on Plebe orientations, midshipman role identity appeared to be largely a function of anticipatory socialization to this new role. Table 8.3 supports this observation because the salience of the midshipmen role at the end of plebe summer is not significantly greater than the salience at wave 1. Plebe summer socialization and indoctrination may prevent the salience of this role identity from decreasing, but it does not cause a significant increase in midshipman role identity salience.

**Table 8.3 Paired Differences of Means for Identity Salience at Wave 1 and Wave 2, USNA Plebes**

	Mean_1	Mean_2	Difference	SD	t <sup>a</sup>
Midshipman Identity Salience					
N = 126	.74	.79	-.048	1.19	-.448
Officer Identity Salience					
N = 126	.55	.67	-.12	1.18	-1.135
Leader Identity Salience					
N = 126	.37	.35	.016	.92	.194
Service Identity Salience					
N = 126	.23	.27	-.039	.73	-.609

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 8.4, ANOVA testing of the mean military identity salience measures at wave 2 across the four academic classes shows that, of the four role identity measures, only the group differences in midshipman role identity salience are statistically significant and a declining trend appears for that identity after plebe year. For midshipmen who have spent more time in the organization, the primary organizational identity is less salient than for those with less time in the organization. Likewise, the mean service identity salience is lower for groups that have spent more time as midshipmen and are closer to assuming the officer role. Conversely, the mean leader identity salience increases for academic groups that have been in the organization longer. The one role identity measure that remains consistent across academic classes is that of future military officer. The Plebes entered the organization with a lower mean officer role identity, but after completing plebe summer, the mean salience of this role identity was consistent with the other academic classes.

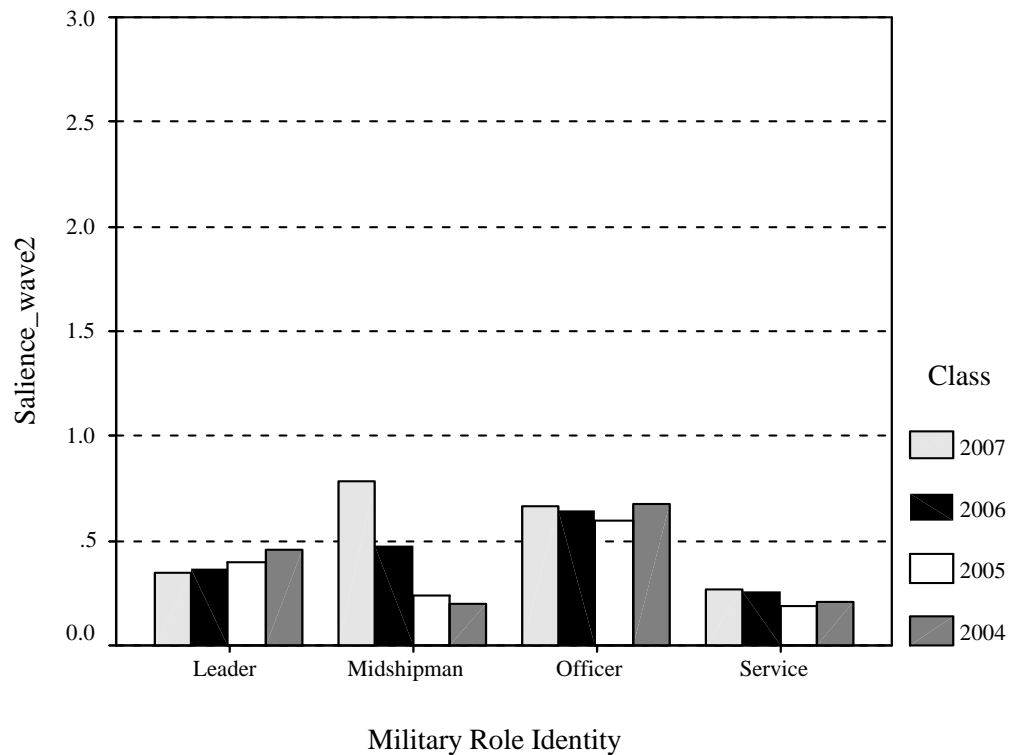
**Table 8.4 ANOVA for Military Identity Salience by Academic Class at Wave 2, USNA Midshipmen**

		Academic Class				
		2007	2006	2005	2004	F <sup>a</sup>
Leader Identity Salience_wave 2						
	N	126	290	274	282	
	Mean	.35	.37	.40	.46	.633
	SD	.86	.86	.85	.93	
Midshipman Identity Salience_wave 2						
	N	126	290	274	282	
	Mean	.79	.47	.23	.20	18.974**
	SD	1.11	.96	.65	.63	
Officer Identity Salience_wave 2						
	N	126	290	274	282	
	Mean	.67	.65	.60	.68	.299
	SD	1.07	1.01	.98	1.07	
Service Identity Salience_wave 2						
	N	126	290	274	282	
	Mean	.27	.26	.19	.21	.790
	SD	.73	.73	.62	.62	

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The mean military role identity saliences of midshipmen are compared graphically by academic class, gender, and minority status in Figures 8.1 thru 8.3. The general trend by academic class in Figure 8.1 is indicative of the trends for the dominant male and Caucasian groups of midshipmen and the comparative effects of gender and minority status on the overall trend line can be extrapolated through visual comparison of different figures.

**Figure 8.1 Military Role Identity Salience by Academic Class at Wave 2, USNA Midshipmen**

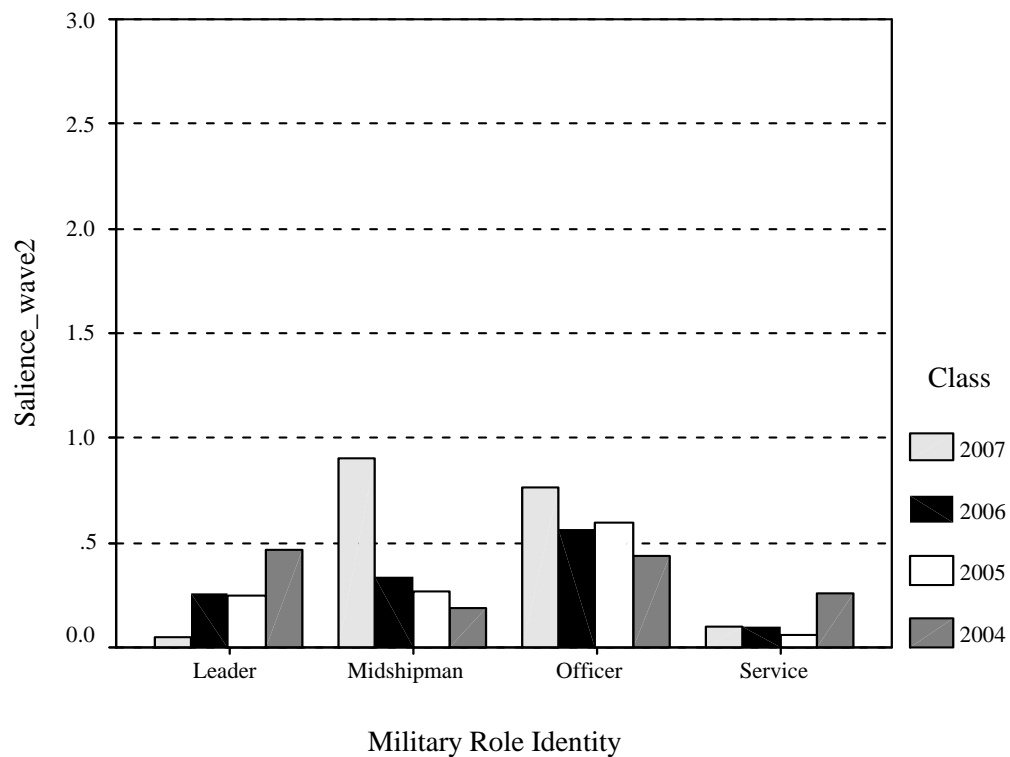


The downward trend across academic classes for midshipman role identity salience is depicted in Figure 8.1, while the relative stability of the future military officer role is also apparent. It appears that leader identity increases as midshipmen spend more time in the organization, which is not surprising considering the emphasis placed on leadership by the organization and the many opportunities to serve in the midshipman hierarchy that are available as they become more senior. The service identity appears to become less salient the longer midshipmen are in the organization, which may occur the longer the period of time an individual is separated from prior enlisted service, but it may also be a function of the distribution of prior enlisted service in the sample.

The mean military role identity salience at wave 2, for women midshipmen by academic class, is displayed in Figure 8.2. Women Plebes express higher midshipman

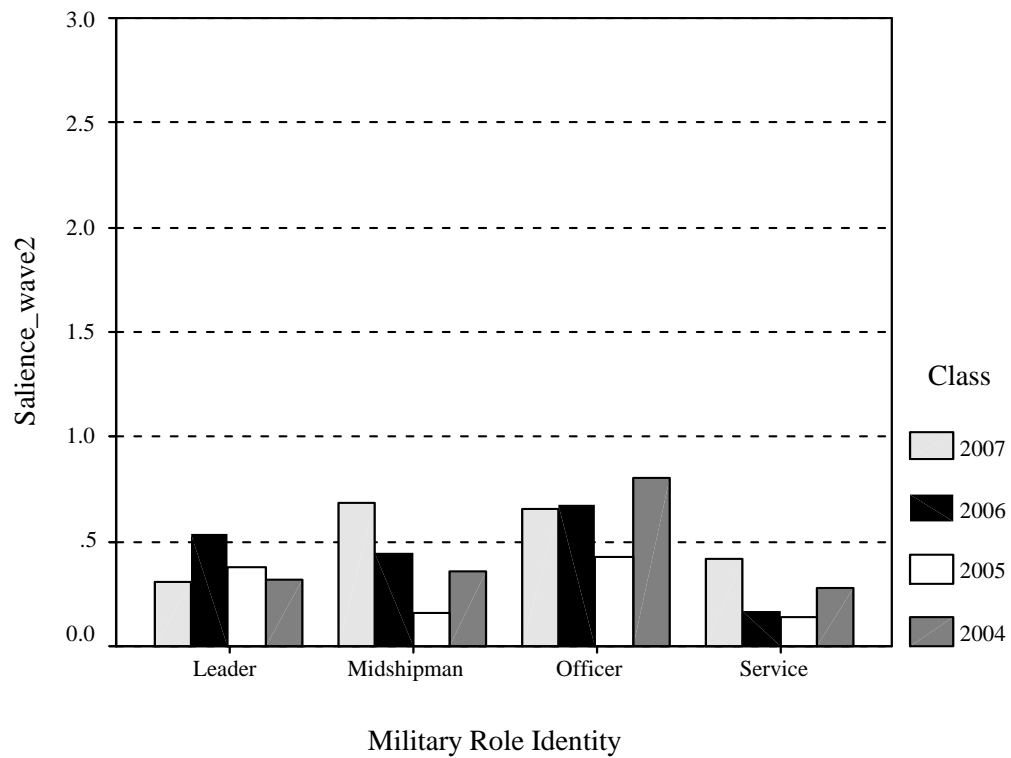
and future military officer role identity salience of any academic class. For the women who have been in the organization longer, the downward trend in midshipman role identity salience is similar to that observed in the overall sample of midshipmen. The increasing trend in leader identity salience by academic class is present in groups of women midshipmen also.

**Figure 8.2 Military Role Identity Salience by Academic Class at Wave 2, USNA Women Midshipmen**



However, unlike the overall sample, the salience of the future officer role identity is lowest for women who have been in the organization longest. The First Class women who are closest to assuming this officer role see it as least salient of all the academic classes. This effect does not seem to be the result of a “trading off” between other military role identities caused by the forced choice question, this group just seems to hold the officer role as less salient than other groups of women midshipmen.

**Figure 8.3 Military Role Identity Saliency by Academic Class at Wave 2, USNA Minority Midshipmen**



In Figure 8.3, the role identities of minority midshipmen are presented. In this figure, a similar trend to the overall pattern of identity saliency is observed for the midshipman and officer role identity saliency measures with the exception that minority midshipmen in the Class of 2005 hold the least salient midshipman and future officer role identities. The overall lower rating of military role identities for minority midshipmen in this class is similar to the pattern of women in the Class of 2004 and probably indicates a cohort effect of lower congruence in organizational orientations. Conversely, minority midshipmen in the Class of 2004 express the highest officer role identity saliency of any minority group, but the mean leader identity saliency of this group is lower than others. While this group of midshipmen is preparing themselves for the assumption of a new



role, they do not see themselves as embodying the main leadership outcomes of the Academy experience.

The reason the forgoing discussion holds importance for this study of midshipmen orientations is that role identity salience, in particular the future officer role identity, was found to be a significant predictor of military career expectations in Plebes at wave 1. The patterns of identity salience development observed in different groups of midshipmen with greater time in the organization may help inform the later study of organization outcomes. In Table 8.5, the wave 1-2 differences in one of the most important organizational outcomes, military career expectations, is presented.

The differences of means for military career expectations are tested from wave 1 to wave 2 for each of the academic year groups and for women and minority midshipmen. In every comparison in Table 8.5, the mean military career expectations decrease from wave 1 to wave 2. However, differences in military career expectations are greatest and statistically significant only for the two most senior academic classes and for women midshipmen. There is very little difference in the group means for incoming midshipmen in the Class of 2007 at waves 1 and 2 and for the Third Class midshipmen who finished plebe academic year at wave 1 (Class of 2006). The highest mean military career expectations are expressed by Plebes at wave 1 while the lowest mean military career expectations are found among the First Class midshipmen at wave 2. In addition, the academic classes with an obligation to serve in the military, on average, hold the lowest mean military career expectations of any academic group (2003 = 2.22, 2004 = 2.17, 2005 = 2.20). It appears the tangible commitment to repay a Naval Academy education with military service does not improve midshipmen plans to make the Navy or

Marine Corps a career. It may be that making such a serious near-term obligation causes midshipmen to reflect on their long-term plans with less certainty.

**Table 8.5 Paired Differences of Mean Military Career Expectations by Academic Class, Gender, and Minority Status at Wave 1 and Wave 2, USNA Midshipmen**

		Academic Class <sup>a</sup>			
		2007	2006	2005	2004
Military Career Expectations	N	120	287	271	280
	Mean_1	2.59	2.54	2.35	2.30
	Mean_2	2.56	2.47	2.20	2.17
	Difference	0.03	0.07	0.15	0.13
	SD	0.53	0.70	0.63	0.63
	t	0.68	1.68	4.08***	3.41***
		Gender/Minority Group <sup>a</sup>			
		Men	Women	Caucasian	Minority
Military Career Expectations	N	793	165	770	188
	Mean_1	2.43	2.40	2.43	2.38
	Mean_2	2.34	2.22	2.32	2.32
	Difference	0.09	0.18	0.12	0.06
	SD	0.63	0.67	0.65	0.59
	t	4.04***	3.46***	4.97***	1.48

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The largest overall decrease in mean military career expectations from wave 1 to wave 2 is found among women midshipmen, while minority midshipmen decrease very little over the same period. The explanation for this decrease is possibly found in the very high expectations held by women as they arrive in the organization and once there, the recognition that opportunities for women in the military are more limited than for men. Incoming women expressed the most positive attitudes about the military workplace and military opportunity, while women exiting the organization expressed some of the least positive attitudes (see Table 7.12). All of these general military attitudes, career expectations, and the difference in military role identities expressed by

incoming and exiting women midshipmen depict an important difference and perhaps a substantial change in the orientations and plans of women midshipmen.<sup>40</sup>

The observed decrease in career plans for women was further analyzed to determine if there was an effect for minority group status. For non-minority women midshipmen, the decrease in career expectations from wave 1 to wave 2 is significant (mean difference = .22,  $p \leq .001$ ,  $N = 126$ ), while for minority women the difference is not significant (mean difference = .05,  $p = .643$ ,  $N = 39$ ). Likewise, when the wave 1 and wave 2 career expectations for women are compared, the wave 1 difference between non-minority and minority women is significant (mean difference = .215,  $p = .037$ ) while the wave 2 difference is no longer significant (mean difference = .005,  $p = .974$ ).

Table 8.6 provides a closer examination of the cross tabulation of the career expectations for the women midshipmen who responded to both wave 1 and wave 2 by minority group status. There is little change in the distribution of career expectations for minority women from wave 1-2, but a greater percentage of non-minority women appear to have more certain career plans at wave 1. At wave 2, however, the distribution of career plans by minority group status is nearly identical and the effect size ( $\eta$ ) is rather small for this relationship at both wave 1 and wave 2, highlighting the fact that, while career expectations differ among groups of women, minority status is not a significant factor in this relationship.<sup>41</sup>

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<sup>40</sup> It must be noted that the wave 1-2 differences are for midshipmen who volunteered to remain in the study and the results of means testing are likely biased.

<sup>41</sup> In the regression model for the career expectations of women midshipmen (Table 9.8) minority group status is not a significant predictor of career plans. Likewise, in the regression model for the career expectations of minority midshipmen (Table 9.9) gender is not a significant predictor of career plans.

**Table 8.6 Military Career Expectations by Minority Status at Wave 1 and Wave 2, USNA Women Midshipmen**

Military Career Expectations at wave 1	Non-Minority (%)	Minority (%)
No	11.1	17.9
Uncertain	34.1	35.9
Yes	54.8	46.2
Total (N)	100.0% (126)	100.0 (39)

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Military Career Expectations at wave 2	Non-Minority	Minority
No	19.7	20.0
Uncertain	38.6	37.5
Yes	41.7	42.5
Total (N)	100.0% (126)	100.0% (39)

b. Wave 1 eta = .093

c. Wave 2 eta = .003

### Summary of Results: Research Question Three

From the results presented in this chapter, patterns of change and differences by academic comparison group and category have emerged in the job values, work beliefs, and role identity salience of midshipmen. Although the orientations of all groups declined on nearly every work measure from wave 1 to wave 2, Plebes still expressed the most idealistic work orientations at wave 2. While the orientations of Plebes changed more than other academic classes on several job values scales, such changes were not in the direction of greater congruence with organizational values as hypothesized. For role identity salience, the Plebes as a group expressed the most salient military role identities at both wave 1 and at wave 2 and the midshipman and future military officer role identity salience of Plebes increased, although neither change was statistically significant. In the overall academic class comparison, officer role identity salience remained relatively constant, and the leader role identity increased slightly between newcomers and members with more time in the organization. Minority midshipmen closest to graduating from the

Naval Academy expressed the highest officer identity salience, suggesting the possibility of anticipatory socialization to this not so distant role. On the other hand, women midshipmen closest to graduation expressed the lowest mean officer role identity salience.

In addition, not only were the military career expectations of all midshipmen observed to decline during the period of summer training, but the mean expectations of midshipmen who have been in the organization longest differed significantly from wave 1 to wave 2 during the summer before their last year. In fact, the career plans for both academic classes with service obligations (Classes of 2004 and 2005) were least certain. If the values, attitudes, and expectations of other groups of midshipmen were as high and as positive about the organization at entry as the Class of 2007 was, then significant changes in their orientations have occurred over the course of four years at the Academy. If these changes actually are present, it is important to determine whether they are the result of the formal and informal experiences of midshipmen at the Academy or the result of typical change and development in youth transitioning to adulthood. The following section investigates the influence of several factors on the outcome measures associated with greater congruence in individual and organizational values and the process of organizational socialization at the Naval Academy.

## **Chapter 9 Socialization, Orientations, and Outcome Measures**

In research question four, job values, work beliefs, military attitudes, and military role identities are combined in a model of organizational socialization to predict outcome measures of socialization associated with a Naval Academy education. Following the argument that greater organizational “fit”, or congruence between individual and organizational values, results in positive individual and organizational outcomes, it was hypothesized that high midshipman role identity salience predicts leadership role behavior and higher academic and military role performance evaluation measures in midshipmen. Second, it was hypothesized that high midshipman role identity salience predicts a greater likelihood that midshipmen would select military work at age 30 and be more satisfied with that work. Third, it was hypothesized that work beliefs and high military role identity (of any kind) would predict not only selection of military work at age 30 and greater satisfaction with that work, but also military career expectations. Lastly, it was hypothesized that these relationships and effects would hold regardless of midshipman gender or minority group status.

To complete these tests, OLS regression analysis models that simulate the effects of organizational socialization were created.<sup>42</sup> These models add variables in three stages. The first stage is the prior experiences and orientations model that simulates the background and demographic conditions of midshipmen and includes the wave 1 job values, work beliefs, and military attitudes. The second stage of the model simulates several environmental influences and includes variables for academic major, varsity athlete status, upperclass and underclass position in the organization (a measure of time

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<sup>42</sup> Cases included in this model of organizational socialization are midshipmen who took wave 1 and wave 2 of the MAS (Total N = 972).

in the organization and actual commitment to military service upon graduation), and where possible, midshipman company (an indicator of the influence of peer culture and living environment). The final stage of the model includes wave 2 job values, work beliefs, the importance of military service to the respondent, and the four military role identity salience measures. Outcome measures are regressed on this model to predict and understand the influence of prior conditions and organizational socialization on the relationship between midshipmen orientations and the expected outcomes of a Naval Academy education.

In regression analysis, particularly in a repeated measures design, there is a potential risk that the correlation of multiple independent variables, if too great (termed multicollinearity), may adversely affect explanation and estimation of results (Hair et al. 1998). The results in this chapter were assessed for multicollinearity through the analysis of correlation matrices and the variance inflation factors (VIF) produced in OLS regression analysis. In the OLS regression models that follow, no observed VIF was greater than 3.1 in the overall sample of midshipmen ( $N = 936$ ) which is well below the typical threshold of 10.0 that indicates high multicollinearity (Hair et al. 1998). VIF values as low as 5.3 correspond to a multiple correlation of  $R = .90$  and given the number of independent variables in the organizational socialization regression models and the repeated measures design of this research, the explanation and estimation of variables measured at both wave 1 and wave 2 might be affected. To assess this effect on the results in this chapter, regression models were run as presented in this chapter, but in an additional stage the wave 1 variables were removed and the effects on the remaining predictor variables assessed. While losing overall explanatory variance due the reduction

in predictors and associated degrees of freedom, the models remained statistically significant and there were no dramatic changes in the statistically significant predictor variables. Thus, it appears that multicollinearity is not a significant problem in the estimation and interpretation of the results.<sup>43</sup>

### Midshipman Role Performance

The first regression model tests and predicts the effects of organizational socialization on the academic performance of midshipmen. In Table 9.1, the academic performance of midshipmen in the MAS, measured by the grade point average or cumulative academic quality point rating (CAQPR) after the Fall 2003 semester, was regressed on the organizational socialization model described above. In the first stage of the model, when controlling for other variables, minority midshipman category, prep school attendance, and an increase in wave 1 mean leisure job values were statistically significant predictors of academic performance in midshipmen, but the signs of these coefficients were all negative. In other words, being a member of a minority group or having attended a prep school before the Naval Academy predicts lower academic performance. Likewise, the midshipmen who place greater value in the free time and leisure aspects of work have lower academic grades.

The positive and statistically significant predictors of academic performance in the first stage of this model were total SAT, wave 1 security job values, wave 1 work beliefs, and prior military service. The strongest overall predictor in this model is total SAT score. Not surprisingly, midshipmen with the highest incoming academic achievement scores continue to attain the highest grades at the Naval Academy. Prior

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<sup>43</sup> The 3-stage regression models are included in this chapter rather than the 4-stage models that assessed multicollinearity because the results between models were similar and as a way to save space.



enlisted service may predict higher grades because the individual sees the Naval Academy as a reward for previous hard work and as an opportunity to achieve a better paying, higher status job in the military. In addition, those midshipmen who value a stable and secure future and those who believe hard work is important (both traditional work ethics) have higher academic grades. The variance explained by this first stage of this model, expressed as adjusted an  $R^2$ , was .263 ( $p < .001$ ) and indicates the importance of prior experiences and orientations on individual performance in the organization.

In the second stage of this model, the effects of the Naval Academy environment were included and the variance explained by the model increased to an adjusted  $R^2$  of .278 ( $p < .001$ ). While the model is statistically significant, the addition of environmental variables accounts for only 6% of the total variance in academic performance. When controlling for other variables, being a minority midshipman and having attended a prep school still predicted lower grades, while total SAT, wave 1 security job values, work beliefs, and prior military service continued to predict higher academic performance.

One variable associated with the Naval Academy environment, academic major group, significantly predicted higher grades. Midshipmen who are closest to the engineering and technical core of an academy education have the highest grade point averages. It is a possibility that midshipmen who perceive that they are less academically capable would choose to not enter the engineering and technical majors. In addition, midshipmen who are having academic difficulty in engineering and technical majors would probably attempt to transfer to the non-technical fields while the opposite is unlikely. In any event, the engineering and technical majors include midshipmen with the highest grade point averages.

**Table 9.1 Multiple Regression: Academic Performance, USNA Midshipmen**

Model <sup>a,b</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>c</sup>
	b		Beta		
<b>1</b> (Constant)	.139	.297		.469	.640
DEMOG_Gender	-.019	.044	-.012	-.422	.673
DEMOG_Minority	-.158	.043	-.110	-3.668	.000***
DEMOG_Father's Education Level	.003	.017	.005	.147	.883
DEMOG_Mother's Education Level	-.015	.018	-.027	-.801	.423
DEMOG_Mother Paid Job When R Young	.004	.015	.008	.266	.790
DEMOG_Prep School	-.135	.048	-.098	-2.780	.006**
DEMOG_Military Service (MIDN)	.155	.070	.072	2.205	.028*
DEMOG_Summer Seminar Attendee	.033	.035	.028	.937	.349
DEMOG_Military Parent	-.034	.030	-.034	-1.121	.263
DEMOG_USNA Legacy	.037	.068	.017	.554	.580
DEMOG_Total SAT	.002	.000	.414	12.207	.000***
Job Values (Extrinsic) Scale wave 1	-.040	.028	-.047	-1.426	.154
Job Values (Influence) Scale wave 1	.036	.032	.040	1.136	.256
Job Values (Intrinsic) Scale wave 1	-.067	.051	-.051	-1.328	.185
Job Values (Leisure) Scale wave 1	-.070	.034	-.080	-2.055	.040*
Job Values (Security) Scale wave 1	.103	.028	.129	3.627	.000***
Job Values (Social Altruism) Scale wave 1	.042	.034	.045	1.234	.217
Work Beliefs Scale wave 1	.064	.029	.079	2.222	.027*
Military as a Place to Work wave 1	-.017	.029	-.019	-.598	.550
Military Opportunity Scale wave 1	-.008	.027	-.009	-.284	.776
<b>2</b> (Constant)	-.288	.309		-.930	.352
DEMOG_Gender	-.017	.044	-.012	-.394	.694
DEMOG_Minority	-.156	.043	-.109	-3.634	.000***
DEMOG_Father's Education Level	-.003	.017	-.006	-.171	.865
DEMOG_Mother's Education Level	-.013	.018	-.024	-.718	.473
DEMOG_Mother Paid Job When R Young	.003	.014	.005	.175	.861
DEMOG_Prep School	-.124	.048	-.090	-2.590	.010**
DEMOG_Military Service (MIDN)	.143	.070	.066	2.039	.042*
DEMOG_Summer Seminar Attendee	.038	.035	.032	1.076	.282
DEMOG_Military Parent	-.038	.030	-.038	-1.284	.200
DEMOG_USNA Legacy	.034	.067	.016	.514	.607
DEMOG_Total SAT	.002	.000	.416	12.246	.000***
Job Values (Extrinsic) Scale wave 1	-.035	.028	-.040	-1.249	.212
Job Values (Influence) Scale wave 1	.032	.032	.035	1.011	.312
Job Values (Intrinsic) Scale wave 1	-.060	.050	-.046	-1.195	.232
Job Values (Leisure) Scale wave 1	-.065	.034	-.075	-1.945	.052
Job Values (Security) Scale wave 1	.090	.028	.113	3.196	.001***
Job Values (Social Altruism) Scale wave 1	.052	.034	.056	1.531	.126
Work Beliefs Scale wave 1	.068	.029	.083	2.363	.018*
Military as a Place to Work wave 1	-.007	.029	-.008	-.247	.805
Military Opportunity Scale wave 1	.003	.027	.004	.129	.897
DEMOG_Varsity Sport Leader	.021	.024	.025	.849	.396
DEMOG_Major Group	.089	.024	.111	3.688	.000***
Underclass or Upperclass	.052	.034	.045	1.504	.133
<b>3</b> (Constant)	-.387	.328		-1.181	.238
DEMOG_Gender	-.030	.045	-.020	-.662	.508
DEMOG_Minority	-.145	.043	-.101	-3.385	.001***

Model <sup>a,b</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>c</sup>
	b		Beta		
DEMOG_Father's Education Level	.004	.017	.008	.225	.822
DEMOG_Mother's Education Level	-.019	.018	-.036	-1.055	.292
DEMOG_Mother Paid Job When R Young	.007	.014	.015	.505	.614
DEMOG_Prep School	-.128	.048	-.093	-2.660	.008**
DEMOG_Military Service (MIDN)	.188	.073	.087	2.571	.010**
DEMOG_Summer Seminar Attendee	.042	.035	.036	1.206	.228
DEMOG_Military Parent	-.028	.030	-.028	-.940	.348
DEMOG_USNA Legacy	.025	.067	.011	.374	.709
DEMOG_Total SAT	.002	.000	.420	12.262	.000***
Job Values (Extrinsic) Scale wave 1	-.088	.038	-.102	-2.349	.019*
Job Values (Influence) Scale wave 1	.002	.036	.002	.059	.953
Job Values (Intrinsic) Scale wave 1	-.016	.055	-.012	-.297	.766
Job Values (Leisure) Scale wave 1	-.037	.039	-.043	-.953	.341
Job Values (Security) Scale wave 1	.074	.032	.093	2.322	.020*
Job Values (Social Altruism) Scale wave 1	.044	.040	.048	1.087	.277
Work Beliefs Scale wave 1	.082	.032	.100	2.515	.012*
Military as a Place to Work wave 1	.011	.030	.012	.372	.710
Military Opportunity Scale wave 1	.009	.027	.010	.319	.750
DEMOG_Varsity Sport Leader	.020	.024	.025	.822	.412
DEMOG_Major Group	.095	.024	.117	3.912	.000***
Underclass or Upperclass	.046	.035	.040	1.306	.192
Job Values (Extrinsic) Scale wave 2	.095	.040	.107	2.379	.018*
Job Values (Influence) Scale wave 2	.070	.037	.076	1.890	.059
Job Values (Intrinsic) Scale wave 2	-.060	.054	-.046	-1.109	.268
Job Values (Leisure) Scale wave 2	-.069	.042	-.077	-1.632	.103
Job Values (Security) Scale wave 2	.016	.033	.020	.495	.621
Job Values (Social Altruism) Scale wave 2	.017	.041	.019	.421	.674
Military Service Important to R wave 2	-.024	.022	-.038	-1.087	.277
Work Beliefs Scale wave 2	-.015	.034	-.018	-.434	.665
Leader Identity Salience wave 2	-.010	.019	-.015	-.503	.615
Midshipman Identity Salience wave 2	-.026	.020	-.038	-1.273	.203
Officer Identity Salience wave 2	-.056	.017	-.100	-3.275	.001***
Service Identity Salience wave 2	-.062	.026	-.072	-2.369	.018*

a. Dependent Variable: DEMOG\_Fall 2004 CAQPR

b.  $R^2$  (Model1) = .279, adj.  $R^2$  = .263,  $F(20, 915) = 17.700$ ,  $p < .001$ ;

$R^2$  (Model-2) = .296, adj.  $R^2$  = .278,  $F(23, 912) = 16.685$ ,  $p < .001$ ;

$R^2$  (Model-3) = .318, adj.  $R^2$  = .291,  $F(35, 900) = 11.968$ ,  $p < .001$  (N = 936)

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In the third stage of this model, the adjusted  $R^2$  increased to .291 ( $p < .001$ ), only 7% increase over the previous stage, and all of the statistically significant predictors from stage two remained. In addition, wave 1 and wave 2 extrinsic job values became statistically significant predictors of academic performance, but in opposite directions.

This switch in signs for the extrinsic predictor variable might be accounted for by the significant wave 1 to wave 2 decrease in extrinsic job values for the three academic classes with declared majors or it may be a function of the high correlation between wave 1 and wave 2 extrinsic job values scales ( $r = .70$ ,  $p \leq .001$ ). Therefore, caution is used in the interpretation of this finding.

Officer identity salience and service identity salience also become statistically significant predictors in the third stage of this model, but both predictors are negative. An explanation for this may be that midshipmen with a higher military role identity salience are less focused on academic achievement and more interested in the occupational outcomes of attending the Naval Academy. Comparing the standardized variables in this model, total SAT and academic major are the strongest predictors of higher academic achievement, while being a minority midshipmen and having higher officer role identity salience are the strongest predictors of lower academic grades. The fact that the officer role identity predicts lower grades in midshipmen reinforces the assumption that this identity is not about the present lives and activities of midshipmen, but the future to which they aspire. In fact, it seems the more midshipmen focus on this role, the less they focus on the primary educational outcome of the organization.

In Table 9.2, the three-stage organizational socialization model is applied to military performance, measured by Fall 2003 cumulative military quality point rating (CMQPR). In the first stage of the model, the explained variance is an adjusted  $R^2$  of .130 ( $p < .001$ ). Similar to the results for academic performance, being a minority status midshipman predicts lower military performance ratings, as does having attended a prep school and expressing a preference for leisure and free time in a job. Likewise,

midshipmen with higher total SAT scores, those who prefer hard work, and those who value stable and secure work environments predict higher military performance grades. In other words, prior achievement and a traditional work ethic influence military performance outcomes.

In stage two of this model, the variables related to the environment are added and the adjusted  $R^2$  increases to .139 ( $p < .001$ ). All of the variables that were statistically significant in stage one remained significant in stage two. In addition, holding other variables constant, an increase in the evaluation of the military as a place to work along with an increase in the varsity sport leadership status of midshipmen significantly predict military performance. Those midshipmen who said the military was a more acceptable place to work at wave 1 had higher military performance grades at the end of the Fall semester. This pro-military attitude may reflect the extent to which midshipmen outwardly express the ideals of the organization and participate in pro-organizational activities, resulting in a positive evaluation of their professional performance as midshipmen. Likewise, while often taking midshipmen away from the day-to-day activities of the organization, being a member of a varsity athletic team and gaining a varsity letter may be evaluated by superiors as a positive contribution to the organization.

In stage three of this model, the wave 2 variables are included and the adjusted  $R^2$  increases to .144 ( $p < .001$ ), a 9% increase over the second stage. In this stage of the model, minority status, prep school, total SAT, and varsity sport leader continue to be statistically significant predictors, while wave 2 intrinsic job values is a negative predictor of military performance.

**Table 9.2 Multiple Regression: Military Performance, USNA Midshipmen**

Model <sup>a,b</sup>	Unstandardized		Standardized		
	Coefficients	Std.	Coefficients	t	Sig. <sup>c</sup>
	b	Error	Beta		
<b>1</b> (Constant)	1.772	.236		7.503	.000
DEMOG_Gender	-.024	.035	-.021	-.670	.503
DEMOG_Minority	-.156	.034	-.149	-4.558	.000***
DEMOG_Father's Education Level	.007	.014	.019	.521	.602
DEMOG_Mother's Education Level	-.003	.015	-.009	-.238	.812
DEMOG_Mother Paid Job When R Young	.006	.012	.017	.520	.603
DEMOG_Prep School	-.079	.039	-.078	-2.051	.041*
DEMOG_Military Service (MIDN)	.031	.056	.020	.559	.576
DEMOG_Summer Seminar Attendee	.038	.028	.044	1.344	.179
DEMOG_Military Parent	-.036	.024	-.049	-1.488	.137
DEMOG_USNA Legacy	-.005	.054	-.003	-.102	.919
DEMOG_Total SAT	.001	.000	.167	4.519	.000***
Job Values (Extrinsic) Scale wave 1	-.032	.023	-.051	-1.426	.154
Job Values (Influence) Scale wave 1	.032	.025	.049	1.269	.205
Job Values (Intrinsic) Scale wave 1	.019	.040	.019	.464	.643
Job Values (Leisure) Scale wave 1	-.056	.027	-.087	-2.075	.038*
Job Values (Security) Scale wave 1	.061	.023	.103	2.678	.008**
Job Values (Social Altruism) Scale wave 1	.028	.027	.041	1.036	.300
Work Beliefs Scale wave 1	.058	.023	.097	2.518	.012*
Military as a Place to Work wave 1	.045	.023	.067	1.930	.054
Military Opportunity Scale wave 1	.003	.022	.005	.133	.894
<b>2</b> (Constant)	1.757	.247		7.109	.000
DEMOG_Gender	-.045	.036	-.041	-1.267	.206
DEMOG_Minority	-.143	.034	-.136	-4.177	.000***
DEMOG_Father's Education Level	.006	.014	.016	.428	.669
DEMOG_Mother's Education Level	-.009	.015	-.022	-.595	.552
DEMOG_Mother Paid Job When R Young	.006	.012	.016	.500	.617
DEMOG_Prep School	-.084	.038	-.083	-2.188	.029*
DEMOG_Military Service (MIDN)	.063	.056	.040	1.125	.261
DEMOG_Summer Seminar Attendee	.046	.028	.053	1.628	.104
DEMOG_Military Parent	-.034	.024	-.046	-1.409	.159
DEMOG_USNA Legacy	-.004	.054	-.003	-.082	.935
DEMOG_Total SAT	.001	.000	.186	5.013	.000***
Job Values (Extrinsic) Scale wave 1	-.031	.022	-.049	-1.372	.171
Job Values (Influence) Scale wave 1	.032	.025	.048	1.254	.210
Job Values (Intrinsic) Scale wave 1	.018	.040	.019	.461	.645
Job Values (Leisure) Scale wave 1	-.062	.027	-.096	-2.297	.022*
Job Values (Security) Scale wave 1	.061	.023	.103	2.687	.007**
Job Values (Social Altruism) Scale wave 1	.025	.027	.038	.940	.347
Work Beliefs Scale wave 1	.055	.023	.091	2.391	.017*
Military as a Place to Work wave 1	.049	.023	.074	2.119	.034*
Military Opportunity Scale wave 1	.002	.022	.003	.084	.933
DEMOG_Varsity Sport Leader	.060	.019	.101	3.095	.002**
DEMOG_Major Group	-.034	.019	-.058	-1.763	.078
Underclass or Upperclass	.011	.028	.013	.387	.699
<b>3</b> (Constant)	1.652	.264		6.260	.000
DEMOG_Gender	-.035	.036	-.031	-.967	.334
DEMOG_Minority	-.134	.034	-.128	-3.895	.000***

Model <sup>a,b</sup>	Unstandardized		Standardized		
	Coefficients	Std.	Coefficients	t	Sig. <sup>c</sup>
	b	Error	Beta		
DEMOG_Father's Education Level	.010	.014	.026	.691	.489
DEMOG_Mother's Education Level	-.012	.015	-.031	-.835	.404
DEMOG_Mother Paid Job When R Young	.009	.012	.025	.774	.439
DEMOG_Prep School	-.093	.039	-.092	-2.401	.017*
DEMOG_Military Service (MIDN)	.089	.059	.056	1.508	.132
DEMOG_Summer Seminar Attendee	.043	.028	.050	1.520	.129
DEMOG_Military Parent	-.033	.024	-.044	-1.353	.176
DEMOG_USNA Legacy	.003	.054	.002	.060	.952
DEMOG_Total SAT	.001	.000	.197	5.246	.000***
Job Values (Extrinsic) Scale wave 1	-.051	.030	-.080	-1.674	.094
Job Values (Influence) Scale wave 1	.012	.029	.018	.426	.670
Job Values (Intrinsic) Scale wave 1	.063	.044	.066	1.435	.151
Job Values (Leisure) Scale wave 1	-.034	.032	-.053	-1.072	.284
Job Values (Security) Scale wave 1	.048	.026	.081	1.853	.064
Job Values (Social Altruism) Scale wave 1	.007	.033	.011	.220	.826
Work Beliefs Scale wave 1	.047	.026	.079	1.817	.070
Military as a Place to Work wave 1	.044	.024	.067	1.852	.064
Military Opportunity Scale wave 1	-.004	.022	-.007	-.197	.844
DEMOG_Varsity Sport Leader	.062	.020	.104	3.178	.002**
DEMOG_Major Group	-.033	.019	-.056	-1.687	.092
Underclass or Upperclass	.008	.028	.010	.300	.764
Job Values (Extrinsic) Scale wave 2	.025	.032	.038	.770	.441
Job Values (Influence) Scale wave 2	.029	.030	.044	.981	.327
Job Values (Intrinsic) Scale wave 2	-.089	.044	-.094	-2.042	.041*
Job Values (Leisure) Scale wave 2	-.022	.034	-.033	-.635	.525
Job Values (Security) Scale wave 2	.024	.026	.040	.905	.366
Job Values (Social Altruism) Scale wave 2	.024	.033	.035	.717	.474
Military Service Important to R wave 2	.031	.018	.068	1.756	.079
Work Beliefs Scale wave 2	.018	.027	.029	.640	.522
Leader Identity Salience wave 2	.025	.015	.052	1.606	.109
Midshipman Identity Salience wave 2	-.021	.016	-.042	-1.296	.195
Officer Identity Salience wave 2	-.021	.014	-.051	-1.528	.127
Service Identity Salience wave 2	-.017	.021	-.027	-.820	.413

a. Dependent Variable: DEMOG\_Fall 2004 CMQPR

b.  $R^2$  (Model-1) = .149, adj.  $R^2$  = .130,  $F(20, 915) = 8.011$ ,  $p < .001$ ;

$R^2$  (Model-2) = .161, adj.  $R^2$  = .139,  $F(23, 912) = 7.584$ ,  $p < .001$ ;

$R^2$  (Model-3) = .176, adj.  $R^2$  = .144,  $F(35, 935) = 5.496$ ,  $p < .001$  ( $N = 935$ )

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

The strongest standardized predictors in stage three of this model are higher total SAT score and being a minority group midshipman. However, the effect of these unstandardized coefficients on military performance is less than that observed in the model for academic performance and the total explained variance in military performance

is only a little more than half that in the academic performance model. In addition, midshipmen who prefer intrinsic job rewards may have lower military performance grades because they are viewed as being concerned with their personal interests and development rather than participating in group activities and supporting group goals. The low explained variance in this model is because the variable with the highest correlation to military performance is academic performance ( $r = .73^{***}$ ) and it is not included as a predictor in this model of prior experiences and organizational socialization.

The final consideration of role performance in the organizational socialization regression model is the midshipman leadership scale, a measure of increasing leadership positions attained by members of the two upperclass midshipman groups. Across all three stages of the model in Table 9.3, the explained variance amounts to an adjusted  $R^2$  of only .030 ( $p = .048$ ). Likewise, the only coefficient that significantly predicts midshipman leadership in both the first and second stages of the model is wave 1 extrinsic job values. The extrinsic rewards of a job are those where individuals value pay and benefits of work, but also where advancement, status, prestige, and respect are valued. It may be that midshipmen who prefer these things in a job see leadership positions at the Naval Academy as a way to engage in and reinforce these values.

In stage three of this model, the only positive and significant coefficient is wave 2 social altruism job values scale. In this case, midshipmen who like to make contact with other people and participate in meaningful work may also see midshipman leadership positions at the Naval Academy as an outlet to realize this value. The switch in signs between several of the wave 1 and wave 2 job values scales is likely the result of



correlation between the measures, but is not a problem when the model is estimated with the wave 1 variables removed.

**Table 9.3 Multiple Regression: Midshipman Leadership Scale, USNA Upperclass Midshipmen (2004/2005)**

Model <sup>a,b,c</sup>	Unstandardized	Std. Error	Standardized	t	Sig. <sup>d</sup>
	Coefficients		Coefficients		
<b>1</b> (Constant)	-2.065	2.189		-.943	.346
DEMOG_Gender	.168	.307	.025	.549	.583
DEMOG_Minority	-.493	.298	-.076	-1.653	.099
DEMOG_Father's Education Level	.005	.117	.002	.046	.964
DEMOG_Mother's Education Level	-.224	.123	-.091	-1.812	.071
DEMOG_Mother Paid Job When R Young	.106	.102	.048	1.037	.300
DEMOG_Prep School	-.391	.326	-.064	-1.201	.230
DEMOG_Military Service (MIDN)	-.081	.475	-.008	-.171	.865
DEMOG_Summer Seminar Attendee	-.083	.244	-.016	-.341	.733
DEMOG_Military Parent	-.223	.208	-.050	-1.072	.284
DEMOG_USNA Legacy	-.023	.444	-.002	-.051	.959
DEMOG_Total SAT	.002	.001	.084	1.641	.101
Job Values (Extrinsic) Scale wave 1	.410	.197	.104	2.079	.038*
Job Values (Influence) Scale wave 1	.192	.219	.049	.874	.383
Job Values (Intrinsic) Scale wave 1	-.063	.350	-.011	-.179	.858
Job Values (Leisure) Scale wave 1	-.099	.226	-.025	-.439	.661
Job Values (Security) Scale wave 1	.092	.191	.026	.480	.632
Job Values (Social Altruism) Scale wave 1	.204	.235	.051	.868	.386
Work Beliefs Scale wave 1	.040	.196	.011	.205	.838
Military as a Place to Work wave 1	.139	.194	.035	.719	.473
Military Opportunity Scale wave 1	.100	.187	.025	.534	.593
<b>2</b> (Constant)	-1.669	2.244		-.744	.457
DEMOG_Gender	.163	.309	.024	.527	.598
DEMOG_Minority	-.459	.300	-.071	-1.530	.127
DEMOG_Father's Education Level	.011	.117	.005	.094	.925
DEMOG_Mother's Education Level	-.233	.124	-.095	-1.876	.061
DEMOG_Mother Paid Job When R Young	.102	.103	.046	1.000	.318
DEMOG_Prep School	-.386	.326	-.063	-1.185	.237
DEMOG_Military Service (MIDN)	-.034	.482	-.004	-.072	.943
DEMOG_Summer Seminar Attendee	-.066	.244	-.013	-.269	.788
DEMOG_Military Parent	-.222	.208	-.050	-1.064	.288
DEMOG_USNA Legacy	.004	.445	.000	.009	.993
DEMOG_Total SAT	.002	.001	.098	1.845	.066
Job Values (Extrinsic) Scale wave 1	.422	.197	.107	2.141	.033*
Job Values (Influence) Scale wave 1	.195	.220	.050	.887	.376
Job Values (Intrinsic) Scale wave 1	-.041	.350	-.007	-.116	.908
Job Values (Leisure) Scale wave 1	-.107	.226	-.027	-.475	.635
Job Values (Security) Scale wave 1	.102	.192	.028	.530	.596
Job Values (Social Altruism) Scale wave 1	.169	.236	.042	.713	.476
Work Beliefs Scale wave 1	.036	.196	.010	.185	.853
Military as a Place to Work wave 1	.147	.194	.037	.759	.448
Military Opportunity Scale wave 1	.094	.187	.024	.501	.617

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>d</sup>
	b		Beta		
DEMOG_Varsity Sport Leader	.020	.160	.006	.124	.901
DEMOG_Major Group	-.320	.235	-.061	-1.362	.174
<b>3</b> (Constant)	-1.775	2.365		-.750	.453
DEMOG_Gender	.076	.314	.011	.241	.809
DEMOG_Minority	-.491	.302	-.076	-1.625	.105
DEMOG_Father's Education Level	-.001	.118	-.001	-.011	.991
DEMOG_Mother's Education Level	-.219	.125	-.089	-1.745	.082
DEMOG_Mother Paid Job When R Young	.100	.103	.045	.972	.332
DEMOG_Prep School	-.371	.329	-.060	-1.127	.260
DEMOG_Military Service (MIDN)	.098	.499	.010	.197	.844
DEMOG_Summer Seminar Attendee	-.005	.249	-.001	-.021	.983
DEMOG_Military Parent	-.180	.211	-.041	-.853	.394
DEMOG_USNA Legacy	.101	.449	.011	.225	.822
DEMOG_Total SAT	.002	.001	.099	1.859	.064
Job Values (Extrinsic) Scale wave 1	.484	.276	.123	1.751	.081
Job Values (Influence) Scale wave 1	.056	.252	.014	.222	.824
Job Values (Intrinsic) Scale wave 1	-.056	.390	-.010	-.142	.887
Job Values (Leisure) Scale wave 1	-.184	.267	-.047	-.687	.492
Job Values (Security) Scale wave 1	.220	.221	.062	.995	.320
Job Values (Social Altruism) Scale wave 1	-.308	.294	-.077	-1.048	.295
Work Beliefs Scale wave 1	.018	.223	.005	.079	.937
Military as a Place to Work wave 1	.101	.202	.026	.503	.615
Military Opportunity Scale wave 1	.000	.193	.000	-.002	.999
DEMOG_Varsity Sport Leader	.056	.162	.016	.344	.731
DEMOG_Major Group	-.278	.237	-.053	-1.172	.242
Job Values (Extrinsic) Scale wave 2	-.131	.283	-.033	-.463	.644
Job Values (Influence) Scale wave 2	.192	.259	.047	.739	.461
Job Values (Intrinsic) Scale wave 2	.062	.362	.011	.172	.864
Job Values (Leisure) Scale wave 2	.107	.295	.026	.363	.717
Job Values (Security) Scale wave 2	-.235	.227	-.066	-1.037	.300
Job Values (Social Altruism) Scale wave 2	.803	.303	.193	2.652	.008**
Military Service Important to R wave 2	.076	.149	.028	.513	.608
Work Beliefs Scale wave 2	-.205	.239	-.055	-.860	.390
Leader Identity Salience wave 2	.094	.131	.033	.714	.475
Midshipman Identity Salience wave 2	.156	.179	.039	.871	.384
Officer Identity Salience wave 2	.073	.120	.029	.610	.542
Service Identity Salience wave 2	.135	.191	.033	.709	.479

a. Dependent Variable: Midshipman Leadership Scale

b. Selecting only cases for which DEMOG\_Academic Class >= 2005

c. R<sup>2</sup> (Model-1) = .060, adj. R<sup>2</sup> = .023, F(20, 511) = 1.634, p = .041;

R<sup>2</sup> (Model-2) = .064, adj. R<sup>2</sup> = .023, F(22, 509) = 1.570, p = .048;

R<sup>2</sup> (Model-3) = .092, adj. R<sup>2</sup> = .030, F(34, 497) = 1.478, p = .043 (N = 532)

d. \* = p ≤ .05, \*\* = p ≤ .01, \*\*\* = p ≤ .001

It may not be that the lack of significant explained variance and predictors in this model is because midshipman leadership is an unexplainable construct, but that the

model does not accurately specify the relationships. In an examination of the bivariate correlations with midshipman leadership positions, the strongest associations are with CMQPR ( $r = .437^{***}$ ), CAQPR ( $r = .257^{***}$ ), wave 2 social altruism job values ( $r = .191^{**}$ ), wave 2 influence job values ( $r = .156^{**}$ ), wave 2 intrinsic job values ( $r = .118^{**}$ ), wave 2 military career expectations ( $r = .121^{**}$ ), and attitudes about including women in a military draft ( $r = -.127^{**}$ ).

It is not surprising that there is a strong relationship between academic and military performance and the midshipman leadership variable. The academic and military performance criteria are the clearest indicators of achievement while at the Naval Academy. Likewise, more idealistic job values expressed by midshipman may be reflected in positive individual attitudes about the organization and a desire to participate in organizational activities, viewed by the administration as more congruent with and supportive of organizational goals and values. Thus, midshipmen with positive organizational attitudes and pro-organizational performance are more likely to be chosen by superiors for leadership roles.

Although higher midshipman role identity does not predict higher in-role performance evaluations, the models and data presented above highlight clear relationships and evidence showing that greater congruence between individual midshipman orientations and organizational goals and values results in higher academic and military performance grades and selection to higher leadership positions in the Brigade of Midshipmen. Conversely, being a member of a minority group at the Naval Academy predicts lower academic and military performance grades that in turn

negatively affect selection to positions of leadership in the Brigade, although this last relationship fails to achieve statistical significance.

As for the effects of organizational socialization, these models show that greater congruence in orientations result in positive outcomes, but the results from previous chapters failed to identify any significant transformation in midshipmen orientations except for the increase in officer and leader role identity salience for groups with more time in the organization. The following sections expand the investigation beyond the present performance of midshipmen to the near-term organizational outcomes of occupational choice and job satisfaction and the long-term military career plans.

#### Military Work Preferences and Job Satisfaction

In this section, the organizational socialization model is used to predict the selection of military work at age 30 among midshipmen and, for those midshipmen who indicate they will be in military work at age 30, what level of satisfaction they expect with this future work. Table 9.4 is a logistic regression classification table of the three-stage organizational socialization model that includes the prediction rates for each stage. Rather than evaluating the model on the percentage of statistically significant explained variance among stages, the logistic regression model utilizes the contingency table in Table 9.4 and the likelihood coefficients and predicted odds in Table 9.5 to evaluate the overall goodness of fit, or effectiveness of the model to predict the selection category of cases.

In Table 9.4, the first stage of the model correctly predicts 67.4 percent of the cases and is a statistically significant improvement in goodness of fit (chi-square) from

the stage 0 model with no predictor variables included ( $R^2 = .131$ ).<sup>44</sup> The second stage of the model adds the Naval Academy environment variables and improves the correct classification of cases to 73 percent, again a statistically significant improvement in chi-square over the base model ( $R^2 = .195$ ). The third stage of the model brings in the wave 2 orientations of midshipmen to predict military work selection and marginally improves the classification of cases to 75.4 percent.

**Table 9.4 Logistic Regression Classification Table: Military Work at Age 30 Selected at Wave 2, USNA Midshipmen**

Step <sup>a,b</sup>		Observed	Predicted Military Work at 30		Percentage Correct
			Military Work Not Selected	Military Work Selected	
<b>0<sup>c</sup></b>	Military Work at 30	Military Work Not Selected	0	401	0.0
		Military Work Selected	0	439	100.0
		Overall Percentage			52.3
<b>1<sup>d</sup></b>	Military Work at 30	Military Work Not Selected	244	157	60.8
		Military Work Selected	117	322	73.3
		Overall Percentage			67.4
<b>2<sup>e</sup></b>	Military Work at 30	Military Work Not Selected	278	123	69.3
		Military Work Selected	104	335	76.3
		Overall Percentage			73.0
<b>3<sup>e</sup></b>	Military Work at 30	Military Work Not Selected	290	111	72.3
		Military Work Selected	96	343	78.1
		Overall Percentage			75.4

a. Constant is included in the model.

b. The cut value for each step is .500

c. Step 0: Initial -2LL = 1162.768 (N = 840)

d. Step 1: -2LL = 1009.986, Chi-square = 152.782 (df = 21,  $p < .001$ ),  $R^2 = .131$

e. Step 2: -2LL = 935.498, Chi-square = 227.270 (df = 55,  $p < .001$ ),  $R^2 = .195$

f. Step 3: -2LL = 841.467, Chi-square = 321.301 (df = 67,  $p < .001$ ),  $R^2 = .276$

While the classification of cases does not increase dramatically in the third stage of the model, the value of chi-square is statistically significant over the base model and the  $R^2$  measure of calculated variance in the model explains nearly 28% of the variance in the choice of military work. The percentage of correctly classified cases increases by

<sup>44</sup> The  $R^2$  of calculated variance associated with logistic regression is a measure of the improvement of the model (goodness of fit) over the classification in the model with no predictor variables entered and is calculated by the formula:  $R^2 = [-2LL_{(0)} - (-2LL_{(Stage)})] / -2LL_{(0)}$  (Hair et al. 1998).

only 23% over the model with no predictor variables, but the greatest statistical certainty about who will choose military work is found in the complete model.

In Table 9.5, the coefficients and predicted odds in the first stage of the model are statistically significant for gender, prior military service, wave 1 leisure job values, evaluation of the military as an acceptable place to work, and the military opportunity scale. Holding other variables constant, the predicted odds of selecting military work at age 30 for women are approximately one-third of those for men. For midshipmen with prior military service, the predicted odds of selecting military work are more than one and one-half times that of midshipmen with no military experience. As preferences for leisure job values at wave 1 increase, the predicted odds of selecting military work decrease by approximately 30%. Conversely, for each unit increase in the rating of the military as an acceptable place to work, the predicted odds of selecting military work at age 30 increase by 120% and for every unit increase in the evaluation of opportunity in the military, the predicted odds of selecting military work increase by 43%.

This stage of the model indicates that the near-term occupational plans of women are significantly different than for men in the organization, while midshipmen with prior experience in the organization envision themselves continuing to work in it. Likewise, positive attitudes about a work place are strong propensity indicators, but also tap directly into the cognitive patterns individuals create and maintain in the self concept. Not surprisingly, individuals who are training and preparing themselves to be in an organization and who must ultimately commit to work there are very likely to rate that workplace as acceptable.

In the second stage of the model, Naval Academy environment variables are added and gender, prior military service, and higher ratings of the acceptability of military work remain significant from first stage. In addition, wave 1 work beliefs are now significant and, holding other variables constant, a one unit increase in the wave 1 work beliefs results in a 35 percent increase in the predicted odds of selecting military work at age 30. The varsity athlete status of midshipmen is also a statistically significant predictor of military work in stage two, where the changes from not being an athlete to being on a varsity team and then winning a varsity letter result in a reduction of at least 30% in the predicted odds of selecting military work. While being on a varsity team results in higher military performance ratings, the informal team cultures may counteract the organizational goal of pursuing a military career.

In addition, midshipman company is a statistically significant predictor of military work selection in three specific instances. Membership in one particular company increases the predicted odds of selecting military work by more than 380%, while in another company the predicted odds are reduced by 64%. In more than half of the companies, the predicted odds of selecting military work at age 30 decrease.<sup>45</sup> While the relationship between company membership and informal culture is significant in only 3 instances, it is expected cultures that are less uniformly supportive of organizational goals and values will result in lower work and career outcomes. The model also shows that as midshipmen incur a formal service obligation as upperclass, the predicted odds of

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<sup>45</sup> For the multiple categorical covariate Midshipman Company, the deviation contrast method of SPSS is used. In this method, each category of the predictor variable except the reference category (first) is compared to the overall effect of company membership. Thus, significant changes in the predicted odds are for those companies that differ statistically from the overall effect.

selecting military work at age 30 decrease rather than increase as hypothesized.

However, this predictor is not statistically significant.

**Table 9.5 Logistic Regression Variables: Military Work at Age 30 Selected at Wave 2, USNA Midshipmen**

Step <sup>a</sup>		Unstandardized Coefficients		Wald	Sig.	Predicted Odds
		B	Std. Error			Exp(B)
<b>1<sup>b</sup></b>	DEMOG_Gender (1)	-1.065	.221	23.179	.000***	.345
	DEMOG_Minority (1)	.051	.205	.061	.805	1.052
	DEMOG_Father's Education Level	.008	.083	.010	.922	1.008
	DEMOG_Mother's Education Level	-.056	.087	.410	.522	.946
	DEMOG_Mother Paid Job When R Young	-.003	.068	.002	.964	.997
	DEMOG_Prep School (1)	-.241	.236	1.040	.308	.786
	DEMOG_Military Service (MIDN) (1)	1.006	.353	8.139	.004**	2.734
	DEMOG_Summer Seminar Attendee (1)	.042	.165	.065	.799	1.043
	DEMOG_Military Parent			1.835	.399	
	DEMOG_Military Parent (1)	.231	.179	1.661	.198	1.260
	DEMOG_Military Parent (2)	.248	.393	.399	.527	1.282
	DEMOG_USNA Legacy	.409	.326	1.569	.210	1.505
	DEMOG_Total SAT	.001	.001	1.046	.307	1.001
	Job Values (Extrinsic) Scale wave 1	.256	.136	3.549	.060	1.291
	Job Values (Influence) Scale wave 1	-.039	.156	.064	.801	.961
	Job Values (Intrinsic) Scale wave 1	.080	.241	.111	.739	1.083
	Job Values (Leisure) Scale wave 1	-.331	.161	4.221	.040*	.718
	Job Values (Security) Scale wave 1	-.188	.136	1.917	.166	.829
	Job Values (Social Altruism) Scale wave 1	.010	.162	.004	.950	1.010
	Work Beliefs Scale wave 1	.230	.135	2.906	.088	1.259
	Military as a Place to Work wave 1	.804	.147	29.785	.000***	2.235
	Military Opportunity Scale wave 1	.357	.130	7.538	.006**	1.429
	Constant	-5.370	1.455	13.628	.000	.005
<b>2<sup>c</sup></b>	DEMOG_Gender (1)	-1.089	.241	20.404	.000***	.337
	DEMOG_Minority (1)	-.048	.224	.046	.831	.953
	DEMOG_Father's Education Level	.086	.091	.894	.344	1.090
	DEMOG_Mother's Education Level	-.054	.093	.332	.565	.948
	DEMOG_Mother Paid Job When R Young	-.002	.073	.001	.973	.998
	DEMOG_Prep School (1)	-.412	.252	2.673	.102	.662
	DEMOG_Military Service (MIDN) (1)	.989	.381	6.727	.009**	2.688
	DEMOG_Summer Seminar Attendee (1)	.022	.177	.015	.903	1.022
	DEMOG_Military Parent			1.390	.499	
	DEMOG_Military Parent (1)	.152	.192	.624	.430	1.164
	DEMOG_Military Parent (2)	.395	.395	1.003	.317	1.485
	DEMOG_USNA Legacy	.458	.344	1.780	.182	1.581
	DEMOG_Total SAT	.000	.001	.002	.964	1.000
	Job Values (Extrinsic) Scale wave 1	.220	.144	2.321	.128	1.246
	Job Values (Influence) Scale wave 1	-.018	.166	.011	.915	.983
	Job Values (Intrinsic) Scale wave 1	.002	.258	.000	.994	1.002
	Job Values (Leisure) Scale wave 1	-.290	.175	2.741	.098	.749
	Job Values (Security) Scale wave 1	-.103	.144	.509	.476	.902
	Job Values (Social Altruism) Scale wave 1	-.003	.173	.000	.988	.997
	Work Beliefs Scale wave 1	.297	.145	4.162	.041*	1.345



Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
Military as a Place to Work wave 1	.844	.158	28.425	.000***	2.327
Military Opportunity Scale wave 1	.236	.141	2.830	.093	1.267
DEMOG_Varsity Sport Leader			9.838	.007	
DEMOG_Varsity Sport Leader (1)	-.403	.187	4.674	.031*	.668
DEMOG_Varsity Sport Leader (2)	-.789	.280	7.967	.005**	.454
DEMOG_Major Group (Undeclared)			2.048	.359	
Major (Non-Technical)	-.531	.371	2.046	.153	.588
Major (Technical/Engineering)	-.418	.345	1.473	.225	.658
Company			46.261	.022	
Company	-.374	.406	.849	.357	.688
Company	-.686	.535	1.646	.199	.503
Company	-.697	.444	2.470	.116	.498
Company	-1.015	.493	4.246	.039*	.362
Company	-1.040	.681	2.330	.127	.354
Company	-.550	.436	1.593	.207	.577
Company	.424	.446	.903	.342	1.528
Company	.480	.434	1.226	.268	1.617
Company	.096	.488	.039	.843	1.101
Company	-.419	.470	.792	.373	.658
Company	-.788	.444	3.145	.076	.455
Company	.654	.493	1.757	.185	1.923
Company	-.247	.377	.431	.512	.781
Company	.235	.368	.409	.523	1.265
Company	-.456	.371	1.507	.220	.634
Company	.273	.460	.352	.553	1.314
Company	-.029	.416	.005	.945	.972
Company	.339	.386	.770	.380	1.404
Company	-.059	.348	.028	.866	.943
Company	-.036	.420	.007	.932	.965
Company	1.109	.547	4.115	.043*	3.032
Company	.582	.408	2.035	.154	1.790
Company	.462	.474	.948	.330	1.587
Company	.088	.381	.053	.818	1.092
Company	-.809	.472	2.940	.086	.445
Company	.481	.517	.863	.353	1.617
Company	.927	.494	3.516	.061	2.527
Company	1.572	.584	7.242	.007**	4.817
Company	-.686	.448	2.342	.126	.504
Underclass or Upperclass (1)	-.163	.184	.786	.375	.850
Constant	-3.686	1.640	5.050	.025	.025
<b>3<sup>d</sup></b> DEMOG_Gender (1)	-1.174	.265	19.653	.000***	.309
DEMOG_Minority (1)	-.073	.239	.094	.759	.929
DEMOG_Father's Education Level	.023	.099	.054	.816	1.023
DEMOG_Mother's Education Level	.010	.100	.011	.918	1.010
DEMOG_Mother Paid Job When R Young	.016	.078	.042	.838	1.016
DEMOG_Prep School (1)	-.399	.268	2.218	.136	.671
DEMOG_Military Service (MIDN) (1)	.964	.418	5.311	.021*	2.623
DEMOG_Summer Seminar Attendee (1)	-.057	.193	.088	.766	.944
DEMOG_Military Parent			.871	.647	
DEMOG_Military Parent (1)	.082	.207	.156	.693	1.085

Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
DEMOG_Military Parent (2)	.388	.430	.815	.367	1.474
DEMOG_USNA Legacy	.752	.379	3.929	.047*	2.120
DEMOG_Total SAT	.001	.001	.367	.545	1.001
Job Values (Extrinsic) Scale wave 1	.252	.214	1.391	.238	1.287
Job Values (Influence) Scale wave 1	-.232	.203	1.309	.253	.793
Job Values (Intrinsic) Scale wave 1	-.108	.303	.128	.721	.898
Job Values (Leisure) Scale wave 1	-.077	.221	.120	.729	.926
Job Values (Security) Scale wave 1	.142	.177	.650	.420	1.153
Job Values (Social Altruism) Scale wave 1	-.185	.221	.699	.403	.831
Work Beliefs Scale wave 1	.058	.177	.106	.745	1.059
Military as a Place to Work wave 1	.552	.169	10.637	.001***	1.737
Military Opportunity Scale wave 1	.100	.153	.429	.512	1.105
DEMOG_Varsity Sport Leader			6.577	.037	
DEMOG_Varsity Sport Leader (1)	-.356	.201	3.150	.076	.700
DEMOG_Varsity Sport Leader (2)	-.704	.304	5.370	.020*	.495
DEMOG_Major Group (Undeclared)			1.935	.380	
Major (Non-Technical)	-.518	.400	1.674	.196	.596
Major (Technical/Engineering)	-.324	.373	.755	.385	.723
Company			45.566	.026	
Company	-.342	.452	.573	.449	.710
Company	-.557	.565	.972	.324	.573
Company	-.972	.509	3.651	.056	.378
Company	-1.242	.538	5.332	.021*	.289
Company	-.674	.720	.875	.350	.510
Company	-.445	.451	.972	.324	.641
Company	.510	.471	1.175	.278	1.666
Company	.143	.474	.092	.762	1.154
Company	-.002	.517	.000	.996	.998
Company	-.280	.502	.311	.577	.756
Company	-1.093	.479	5.221	.022*	.335
Company	.556	.528	1.110	.292	1.744
Company	-.284	.414	.470	.493	.753
Company	.020	.394	.003	.960	1.020
Company	-.631	.405	2.435	.119	.532
Company	.377	.486	.602	.438	1.458
Company	.247	.456	.294	.588	1.280
Company	.365	.423	.745	.388	1.441
Company	-.209	.368	.322	.570	.811
Company	.023	.461	.002	.960	1.023
Company	1.181	.582	4.121	.042*	3.256
Company	.715	.439	2.655	.103	2.043
Company	.278	.478	.339	.561	1.320
Company	.142	.405	.122	.727	1.152
Company	-.675	.524	1.656	.198	.509
Company	.693	.565	1.502	.220	1.999
Company	1.016	.520	3.814	.051	2.761
Company	1.696	.655	6.702	.010**	5.454
Company	-.653	.481	1.844	.174	.520
Underclass or Upperclass (1)	-.047	.203	.054	.817	.954
Job Values (Extrinsic) Scale wave 2	-.013	.227	.003	.954	.987

Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
Job Values (Influence) Scale wave 2	-.043	.202	.045	.832	.958
Job Values (Intrinsic) Scale wave 2	.436	.308	2.009	.156	1.547
Job Values (Leisure) Scale wave 2	-.190	.240	.626	.429	.827
Job Values (Security) Scale wave 2	-.585	.185	10.023	.002**	.557
Job Values (Social Altruism) Scale wave 2	.313	.228	1.884	.170	1.368
Work Beliefs Scale wave 2	.122	.190	.414	.520	1.130
Military Service Important to R wave 2	.694	.125	30.925	.000***	2.002
Midshipman Identity Salience wave 2	-.093	.105	.786	.375	.911
Leader Identity Salience wave 2	.160	.111	2.062	.151	1.174
Officer Identity Salience wave 2	.246	.094	6.825	.009**	1.279
Service Identity Salience wave 2	.274	.148	3.460	.063	1.316
Constant	-4.827	1.852	6.796	.009	.008

a. Step 0: Initial -2LL = 1162.768 (N = 840)

b. Step 1: -2LL = 1009.986, Chi-square = 152.782 (df = 21,  $p < .001$ ),  $R^2 = .131$

c. Step 2: -2LL = 935.498, Chi-square = 227.270 (df = 55,  $p < .001$ ),  $R^2 = .195$

d. Step 3: -2LL = 841.467, Chi-square = 321.301 (df = 67,  $p < .001$ ),  $R^2 = .276$

In the final stage of this model, the wave 2 measures are added and gender, prior military service, evaluation of the military workplace, varsity letter winners, and membership in four specific midshipman companies significantly predict the choice of military work at age 30. In addition, the predicted odds that military work will be selected are more than double for midshipmen with a parent who graduated from the Naval Academy. Of the wave 2 measures included in the third stage, an increase in the value placed on secure and stable work results in a reduction in the predicted odds by more than 40%, while an increase in belief that military service is important doubles the predicted odds that military work will be selected. Of the military role identities, the officer identity is the only measure that significantly predicts selecting military work at age 30 and improves the odds of selection by about 28 percent.

In Table 9.6, expected military job satisfaction was regressed on the organizational socialization model for only those midshipmen who indicated that they would be serving in the military at age 30. In the first stage of this model, the explained variance expressed as an adjusted  $R^2$  was .179 ( $p < .001$ ). There were four statistically

significant predictors of satisfaction in this stage of the model (wave 1 social altruism job values, wave 1 work beliefs, the evaluation of the military as a place to work, and military opportunity scale) and the coefficients were positive in each case. Midshipmen who value making friends and contacts and participating in worthwhile work see the military as providing these rewards. From day one, the organization stresses teamwork and the core values of honor, courage, and commitment and highlights the selfless service of individuals in the organization. It is not surprising that those who hold higher social altruism job values would expect to be more satisfied in the military work environment. It also seems logical that positive evaluations about military work and opportunities would predict higher expected job satisfaction in the military. Likewise, midshipmen with stronger work beliefs feel work is more important to them and it is unlikely that they would see themselves in a job where they would not be satisfied.

In stage two of this model, the environment variables were added and wave 1 social altruism job values, the military as a place to work, and military opportunity scale remained significant predictors of job satisfaction across the first and second stages of the model. As midshipmen move toward the core engineering and technical majors, the coefficient predicting job satisfaction is negative. It may be that midshipmen with the most technical educations see the military work they will be doing at age 30 as unrelated to their present studies and therefore, less satisfying. However, the most satisfied group by academic major, the undesignated Plebes, are also the most idealistic and express the most certain military work and career plans and may explain this relationship. In the second stage of the model, the variance increases to an adjusted  $R^2 = .185$  ( $p < .001$ ) and explains an increase of only 5% over the first stage of this model.

**Table 9.6 Multiple Regression: Satisfaction with Military Work, USNA Midshipmen**

Model <sup>a,b,c</sup>	Unstandardized	Std. Error	Standardized	t	Sig. <sup>d</sup>
	Coefficients		Coefficients		
	b		Beta		
<b>1</b> (Constant)	2.151	.694		3.099	.002
DEMOG_Gender	-.140	.116	-.053	-1.208	.227
DEMOG_Minority	-.168	.096	-.078	-1.744	.082
DEMOG_Father's Education Level	.001	.039	.001	.024	.981
DEMOG_Mother's Education Level	.001	.112	.001	.011	.992
DEMOG_Mother Paid Job When R Young	.001	.069	.001	.017	.987
DEMOG_Prep School	-.082	.146	-.028	-.563	.574
DEMOG_Military Service (MIDN)	-.004	.032	-.006	-.133	.895
DEMOG_Summer Seminar Attendee	.003	.040	.004	.076	.940
DEMOG_Military Parent	.056	.080	.032	.701	.484
DEMOG_USNA Legacy	-.001	.000	-.081	-1.577	.116
DEMOG_Total SAT	-.216	.138	-.072	-1.564	.118
Job Values (Extrinsic) Scale wave 1	.013	.067	.010	.202	.840
Job Values (Influence) Scale wave 1	.114	.073	.085	1.566	.118
Job Values (Intrinsic) Scale wave 1	-.124	.111	-.065	-1.115	.265
Job Values (Leisure) Scale wave 1	-.111	.076	-.090	-1.461	.145
Job Values (Security) Scale wave 1	-.045	.067	-.038	-.680	.497
Job Values (Social Altruism) Scale wave 1	.210	.079	.151	2.660	.008**
Work Beliefs Scale wave 1	.155	.073	.097	2.107	.036*
Military as a Place to Work wave 1	.243	.064	.174	3.798	.000***
Military Opportunity Scale wave 1	.228	.067	.177	3.400	.001***
<b>2</b> (Constant)	2.605	.730		3.567	.000
DEMOG_Gender	-.156	.116	-.059	-1.347	.179
DEMOG_Minority	-.149	.097	-.069	-1.534	.126
DEMOG_Father's Education Level	.009	.039	.012	.239	.811
DEMOG_Mother's Education Level	-.024	.112	-.012	-.216	.829
DEMOG_Mother Paid Job When R Young	.004	.069	.003	.065	.948
DEMOG_Prep School	-.038	.147	-.013	-.258	.796
DEMOG_Military Service (MIDN)	-.005	.031	-.006	-.148	.883
DEMOG_Summer Seminar Attendee	-.006	.040	-.008	-.152	.879
DEMOG_Military Parent	.054	.080	.031	.670	.503
DEMOG_USNA Legacy	-.001	.000	-.080	-1.554	.121
DEMOG_Total SAT	-.216	.138	-.072	-1.569	.117
Job Values (Extrinsic) Scale wave 1	.012	.067	.009	.178	.859
Job Values (Influence) Scale wave 1	.114	.073	.085	1.571	.117
Job Values (Intrinsic) Scale wave 1	-.127	.111	-.066	-1.141	.254
Job Values (Leisure) Scale wave 1	-.110	.076	-.089	-1.460	.145
Job Values (Security) Scale wave 1	-.047	.067	-.039	-.703	.483
Job Values (Social Altruism) Scale wave 1	.196	.079	.141	2.482	.013*
Work Beliefs Scale wave 1	.138	.074	.087	1.879	.061
Military as a Place to Work wave 1	.236	.064	.169	3.691	.000***
Military Opportunity Scale wave 1	.219	.067	.169	3.260	.001***
DEMOG_Varsity Sport Leader	.043	.060	.031	.718	.473
DEMOG_Major Group	-.111	.051	-.098	-2.150	.032*
Underclass or Upperclass	-.022	.077	-.013	-.279	.781
<b>3</b> (Constant)	1.402	.709		1.978	.049
DEMOG_Gender	-.167	.108	-.063	-1.549	.122

Model <sup>a,b,c</sup>	Unstandardized		Standardized		
	Coefficients	Std.	Coefficients	t	Sig. <sup>d</sup>
	b	Error	Beta		
DEMOG_Minority	-.142	.089	-.066	-1.588	.113
DEMOG_Father's Education Level	-.004	.036	-.006	-.121	.904
DEMOG_Mother's Education Level	-.014	.103	-.007	-.138	.891
DEMOG_Mother Paid Job When R Young	-.014	.063	-.009	-.227	.821
DEMOG_Prep School	.010	.143	.003	.068	.946
DEMOG_Military Service (MIDN)	.013	.029	.018	.447	.655
DEMOG_Summer Seminar Attendee	-.022	.037	-.027	-.598	.550
DEMOG_Military Parent	.006	.075	.003	.077	.939
DEMOG_USNA Legacy	.000	.000	-.052	-1.073	.284
DEMOG_Total SAT	-.014	.128	-.005	-.112	.911
Job Values (Extrinsic) Scale wave 1	.037	.082	.028	.458	.647
Job Values (Influence) Scale wave 1	-.036	.077	-.027	-.468	.640
Job Values (Intrinsic) Scale wave 1	-.231	.114	-.121	-2.026	.043*
Job Values (Leisure) Scale wave 1	.100	.081	.081	1.235	.217
Job Values (Security) Scale wave 1	-.043	.066	-.036	-.647	.518
Job Values (Social Altruism) Scale wave 1	.179	.085	.129	2.104	.036*
Work Beliefs Scale wave 1	.069	.068	.044	1.014	.311
Military as a Place to Work wave 1	.186	.060	.133	3.109	.002**
Military Opportunity Scale wave 1	.040	.069	.031	.585	.559
DEMOG_Varsity Sport Leader	.061	.055	.044	1.106	.269
DEMOG_Major Group	-.108	.048	-.096	-2.273	.024*
Underclass or Upperclass	.021	.072	.012	.296	.767
Job Values (Extrinsic) Scale wave 2	-.104	.090	-.074	-1.153	.250
Job Values (Influence) Scale wave 2	.126	.077	.090	1.628	.104
Job Values (Intrinsic) Scale wave 2	.299	.115	.155	2.595	.010**
Job Values (Leisure) Scale wave 2	-.196	.090	-.144	-2.183	.030*
Job Values (Security) Scale wave 2	-.001	.071	-.001	-.014	.989
Job Values (Social Altruism) Scale wave 2	-.074	.085	-.051	-.862	.389
Military Service Important to R wave 2	.302	.051	.271	5.886	.000***
Work Beliefs Scale wave 2	.255	.075	.192	3.416	.001***
Leader Identity Salience wave 2	-.030	.041	-.030	-.730	.465
Midshipman Identity Salience wave 2	.001	.039	.001	.017	.986
Officer Identity Salience wave 2	.037	.033	.049	1.151	.250
Service Identity Salience wave 2	-.021	.049	-.019	-.437	.662

a. Dependent Variable: Military Work at 30 Job Satisfaction\_wave 2

b. Selecting only cases for which Military Work at 30 Selected\_wave 2 = MILITARY: Selected

c.  $R^2$  (Model-1) = .213, adj.  $R^2$  = .179,  $F(20, 462) = 6.270$ ,  $p < .001$ ;

$R^2$  (Model-2) = .224, adj.  $R^2$  = .185,  $F(23, 459) = 5.768$ ,  $p < .001$ ;

$R^2$  (Model-3) = .373, adj.  $R^2$  = .324,  $F(35, 447) = 7.604$ ,  $p < .001$  ( $N = 483$ )

d. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In the third stage of the socialization model, the adjusted  $R^2$  increases to .324 ( $p < .002$ ), a 30% increase in explained variance over the second stage. Holding other measures constant, an increase in wave 1 intrinsic job values of midshipmen results in a decrease in the expected satisfaction with military work, while an increase in wave 2

intrinsic job values result in an increase in expected job satisfaction. This outcome may be due partly to the significant decrease in intrinsic job values observed from wave 1 to wave 2 or to midshipmen realizing at wave 2 that military work can satisfy their individual work needs. It may also be related to the correlation between wave 1 and wave 2 measures. In addition, an increase in wave 2 leisure job values results in a statistically significant decrease in job satisfaction. These midshipmen realize the sacrifices and commitment required by military work yet, for whatever reason, see themselves still in the military at age thirty. Increases in the importance of military service and work beliefs at wave 2 predict higher job satisfaction and highlight the relationship between individual work orientations and organizational outcomes.

To summarize this test of near-term organizational outcomes, the logistic regression model successfully predicts more than 75% of the cases and explains nearly 28% of the variance in the selection of military work by midshipmen. For this near-term organizational outcome, being female and valuing security in a job were the most significant predictors of not seeing oneself in military work at the age of 30. As previous results highlighted, women midshipmen express lower military career expectations than men and those women closest to graduating from the Academy have the lowest midshipman and officer role identity salience.

The most significant predictors of choosing military work were positive attitudes about the workplace, a belief that military service is important, and higher officer role identity.<sup>46</sup> This model predicts with confidence respondents who select military work, but the hypothesized positive effect of high midshipmen role identity fails to achieve

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<sup>46</sup> Although membership in one particular midshipman company resulted in the predicted odds of selecting military work nearly five and one-half times greater than even odds, the Ns for midshipman company range from 15 to 54 and preclude accurate analysis and interpretation.

statistical significance. The fact that wave 1 work beliefs predicted high job satisfaction and wave 2 work beliefs predicted even higher job satisfaction indicates that work beliefs grew stronger in some midshipmen from wave 1 to wave 2, while the mean for most midshipmen declined. However, higher officer role identity salience at wave 2 does not significantly influence military job satisfaction at wave 2 despite the fact that it significantly predicts the selection of military work at age 30.

In addition to the individual orientations of midshipmen, significant predictors associated with the organizational environment emerged in these models. These predictors point to the positive and negative effects of formal and informal culture that were not observed in the individual outcome models. Furthermore, the model predicting military work choice highlights several variables in which greater value congruence likely associated with organizational socialization appears to produce positive organizational outcomes. The next section tests whether these significant predictors hold across long-term organizational outcomes.

### Military Career Expectations

In this section, the organizational socialization model is used to predict the certainty of midshipmen military career expectations. In Table 9.7, the explained variance in the first stage of this model is an adjusted  $R^2 = .167$  ( $p < .001$ ) and six different statistically significant variables help predict career expectations of midshipmen. The coefficient of the predictor for gender is negative and, coincident with the lower career expectations observed for women at wave 2, women midshipmen are less certain they will pursue a military career. For midshipmen with at least one military parent, the coefficient of the predictor is positive, confirming the socializing effects of



parental work or the military lifestyle on youth. Leisure job values again emerge as a negative predictor and, as in other models, midshipmen who value free time and vacations are less certain they will pursue a military career. Wave 1 work beliefs, the acceptability of the military as a place to work, and the evaluation of military opportunity are all positive and statistically significant predictors of military career expectations. Midshipmen with the most positive military work attitudes are most certain they will pursue a military career.

In stage two of the model, the environment variables are included and all of the statistically significant predictors from the first stage of the model remain. The explained variance of stage two increases to an adjusted  $R^2 = .195$  ( $p < .001$ ), a 14% increase over the first stage of the model. However, the only environment variable that significantly predicts career expectations in this stage is upperclass/underclass status and the coefficient in this case is negative. The upperclass midshipmen (2004/2005) who have incurred a service obligation and who have the most time in the organization express less certainty in their career plans than those more junior and more idealistic underclass (2006/2007) midshipmen.

In the final stage of this model, wave 2 orientations are added and the adjusted  $R^2$  nearly doubles to .362 ( $p < .001$ ). All of the statistically significant predictors from the first stage of the model drop from significance except for the two military attitudes: the acceptability of military work and the military opportunity scale. Upperclass/underclass status remains statistically significant in the third stage of this model, while academic major group becomes a significant and positive predictor of military career expectations. The effects of academic major group on the long-term career plans are positive, yet this

same variable is negative for satisfaction with military work at age 30. Midshipmen in the engineering and technical fields may express less satisfaction with military work, but the organization encourages and supports participation in these majors and midshipmen selecting them may have higher career expectations to begin with.

Of the wave 2 orientations included in the third stage of the model, social altruism at wave 2, the importance of military service, and wave 2 work beliefs all positively predict military career expectations. In addition, three of the four military role identities are statistically significant predictors of career expectations in the final stage of the model. Of the three significant role identity predictors, two are positive with the coefficient for officer role identity salience largest and the coefficient for service role identity salience second. Leader role identity salience is also statistically significant, but the coefficient is negative. Midshipmen who see themselves as leaders may not internalize the goals of the organization as highly as those who identify with the role of future officer. The negative coefficient for leader identity also may be affected by those women midshipmen in more senior classes who have a high leader role identity salience but lower officer role identity and less certain career plans.

The strongest predictors of military career plans are found in the wave 2 orientations of midshipmen and are the measures associated with greater congruence or “fit” between individual and organizational values. Those midshipmen who have either positive military work attitudes, higher officer role identity salience, believe that work will be central to them, feel that social altruism values can be met through military work, or believe that military service is important appear to be most supportive of and share the most congruent values to those of the military organization. Although gender and

minority status are not significant predictors of military career plans, the model indicates that both groups of midshipmen express less certainty in their plans for a military career.

The next two models specifically analyze the career plans for each of these two groups.

**Table 9.7 Multiple Regression: Military Career Expectations at Wave 2, USNA Midshipmen**

Model <sup>a,b</sup>	Unstandardized	Standardized		t	Sig. <sup>c</sup>
	Coefficients	Coefficients			
	b	Std. Error	Beta		
<b>1</b> (Constant)	.893	.390		2.290	.022
DEMOG_Gender	-.137	.058	-.073	-2.364	.018*
DEMOG_Minority	.007	.056	.004	.127	.899
DEMOG_Father's Education Level	-.005	.023	-.008	-.223	.824
DEMOG_Mother's Education Level	-.014	.024	-.022	-.597	.550
DEMOG_Mother Paid Job When R Young	.012	.019	.020	.636	.525
DEMOG_Prep School	-.101	.064	-.059	-1.589	.112
DEMOG_Military Service (MIDN)	.094	.092	.035	1.023	.307
DEMOG_Summer Seminar Attendee	.013	.046	.009	.285	.776
DEMOG_Military Parent	.087	.040	.070	2.181	.029*
DEMOG_USNA Legacy	-.044	.089	-.016	-.496	.620
DEMOG_Total SAT	.000	.000	-.024	-.678	.498
Job Values (Extrinsic) Scale wave 1	.021	.037	.019	.551	.582
Job Values (Influence) Scale wave 1	.053	.042	.048	1.268	.205
Job Values (Intrinsic) Scale wave 1	-.017	.066	-.011	-.261	.794
Job Values (Leisure) Scale wave 1	-.123	.044	-.114	-2.764	.006**
Job Values (Security) Scale wave 1	-.018	.037	-.018	-.474	.636
Job Values (Social Altruism) Scale wave 1	.048	.045	.042	1.072	.284
Work Beliefs Scale wave 1	.078	.038	.077	2.059	.040*
Military as a Place to Work wave 1	.243	.038	.217	6.355	.000***
Military Opportunity Scale wave 1	.158	.036	.147	4.414	.000***
<b>2</b> (Constant)	1.355	.403		3.360	.001
DEMOG_Gender	-.132	.058	-.071	-2.285	.023*
DEMOG_Minority	-.005	.056	-.003	-.091	.928
DEMOG_Father's Education Level	.000	.023	.001	.020	.984
DEMOG_Mother's Education Level	-.010	.024	-.016	-.442	.658
DEMOG_Mother Paid Job When R Young	.014	.019	.023	.729	.466
DEMOG_Prep School	-.100	.063	-.059	-1.599	.110
DEMOG_Military Service (MIDN)	.071	.092	.027	.772	.440
DEMOG_Summer Seminar Attendee	.000	.046	.000	-.010	.992
DEMOG_Military Parent	.092	.039	.074	2.349	.019*
DEMOG_USNA Legacy	-.026	.087	-.010	-.298	.765
DEMOG_Total SAT	.000	.000	-.039	-1.079	.281
Job Values (Extrinsic) Scale wave 1	.014	.037	.013	.368	.713
Job Values (Influence) Scale wave 1	.046	.041	.041	1.114	.266
Job Values (Intrinsic) Scale wave 1	-.027	.065	-.017	-.410	.682
Job Values (Leisure) Scale wave 1	-.120	.044	-.111	-2.728	.006**
Job Values (Security) Scale wave 1	-.003	.037	-.003	-.079	.937
Job Values (Social Altruism) Scale wave 1	.050	.044	.043	1.126	.260

Model <sup>a,b</sup>	Unstandardized	Standardized		t	Sig. <sup>c</sup>
	Coefficients	d	Coefficients		
	b	Std. Error	Beta		
Work Beliefs Scale wave 1	.078	.037	.077	2.073	.038*
Military as a Place to Work wave 1	.237	.038	.211	6.267	.000***
Military Opportunity Scale wave 1	.151	.035	.142	4.291	.000***
DEMOG_Varsity Sport Leader	-.016	.032	-.015	-.491	.623
DEMOG_Major Group	.040	.032	.040	1.262	.207
Underclass or Upperclass	-.261	.045	-.182	-5.804	.000***
<b>3</b> (Constant)	.762	.384		1.982	.048
DEMOG_Gender	-.099	.053	-.053	-1.877	.061
DEMOG_Minority	-.010	.050	-.006	-.209	.835
DEMOG_Father's Education Level	-.015	.020	-.023	-.718	.473
DEMOG_Mother's Education Level	.004	.021	.006	.185	.854
DEMOG_Mother Paid Job When R Young	.017	.017	.028	1.003	.316
DEMOG_Prep School	-.070	.056	-.041	-1.245	.213
DEMOG_Military Service (MIDN)	.013	.086	.005	.148	.882
DEMOG_Summer Seminar Attendee	-.020	.041	-.014	-.488	.625
DEMOG_Military Parent	.064	.035	.051	1.822	.069
DEMOG_USNA Legacy	.042	.079	.016	.538	.591
DEMOG_Total SAT	.000	.000	-.010	-.318	.750
Job Values (Extrinsic) Scale wave 1	-.016	.044	-.015	-.355	.722
Job Values (Influence) Scale wave 1	-.030	.042	-.027	-.719	.472
Job Values (Intrinsic) Scale wave 1	.024	.064	.015	.376	.707
Job Values (Leisure) Scale wave 1	.039	.046	.036	.839	.402
Job Values (Security) Scale wave 1	.014	.038	.014	.381	.703
Job Values (Social Altruism) Scale wave 1	-.040	.047	-.035	-.837	.403
Work Beliefs Scale wave 1	-.022	.038	-.022	-.580	.562
Military as a Place to Work wave 1	.107	.035	.095	3.063	.002**
Military Opportunity Scale wave 1	.072	.032	.067	2.233	.026*
DEMOG_Varsity Sport Leader	.014	.029	.014	.505	.614
DEMOG_Major Group	.066	.028	.066	2.315	.021*
Upperclass or Underclass	-.204	.041	-.143	-4.967	.000***
Job Values (Extrinsic) Scale wave 2	.034	.047	.031	.733	.464
Job Values (Influence) Scale wave 2	.022	.043	.019	.502	.616
Job Values (Intrinsic) Scale wave 2	.008	.064	.005	.131	.895
Job Values (Leisure) Scale wave 2	-.137	.050	-.124	-2.748	.006**
Job Values (Security) Scale wave 2	-.052	.038	-.053	-1.365	.172
Job Values (Social Altruism) Scale wave 2	.129	.049	.111	2.661	.008**
Military Service Important to R wave 2	.259	.026	.333	10.009	.000***
Work Beliefs Scale wave 2	.102	.040	.100	2.537	.011*
Leader Identity Salience wave 2	-.048	.022	-.060	-2.153	.032*
Midshipman Identity Salience wave 2	.042	.024	.050	1.780	.075
Officer Identity Salience wave 2	.072	.020	.105	3.644	.000***
Service Identity Salience wave 2	.084	.031	.080	2.751	.006**

a. Dependent Variable: Military Career Expectations wave 2

b.  $R^2$  (Model-1) = .185, adj.  $R^2$  = .167,  $F(20, 915) = 10.404$ ,  $p < .001$ ;

$R^2$  (Model-2) = .215, adj.  $R^2$  = .195,  $F(23, 912) = 10.861$ ,  $p < .001$ ;

$R^2$  (Model-3) = .386, adj.  $R^2$  = .362,  $F(35, 900) = 16.172$ ,  $p < .001$  (N = 936)

c. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In Table 9.8, the organizational socialization regression model is used to predict the career orientations of women midshipmen who took both wave 1 and wave 2 of the MAS. The explained variance of this first stage is an adjusted  $R^2 = .190$  ( $p < .001$ ). In the first stage of this gender model, three statistically significant predictors of career expectations are observed. The first two variables, wave 1 extrinsic job values and the evaluation of the military as a place to work, have positive coefficients and the third variable, wave 1 leisure job values again serves as a negative predictor of military career plans. As in the model for all midshipmen and as observed in the cross-tabulations in Chapter 8, minority group status does not significantly affect the career expectations of women midshipmen.

In the second stage of the model, environment variables are added, and the variance of the model decreases to an adjusted  $R^2$  of .187 ( $p < .001$ ). Wave 1 leisure job values and the evaluation of the military as a workplace are the only statistically significant predictors of the military career expectations of women in the second stage of the model. This reduction in the adjusted  $R^2$  may indicate that the environment, as conceptualized in this model, has less impact on the career expectations of women than in the overall model, or it may be that the increase in the degrees of freedom in this stage off-sets any gain in explanatory power provided by the environment for this sample of women.

In the third stage of this model, the adjusted  $R^2$  increases to .328 ( $p < .001$ ), an increase of 37% over the second stage of the model. An entirely different set of variables emerge as statistically significant predictors of women midshipmen military career orientations. The importance of military service to the respondent is the strongest

significant predictor of career expectations, similar to that found in the general model assessing all midshipmen in Table 9.7. The other positive predictor of military career expectations in women is wave 2 work beliefs. As in the overall model of career expectations, women who believe work will be important to them and military service is important are most certain in their career plans. However, being the daughter of a USNA graduate results in a decrease in career plans and it may be that these women came to the Naval Academy for reasons other than their own. Compared to the overall career model in which the unstandardized coefficient of USNA legacy was small ( $b = .042$ ,  $p = .591$ ), the effect for women is extremely large ( $b = -.535$ ,  $p = .038$ ).

Unlike the overall career model in Table 9.7, none of the military role identities are significant predictors of military career expectations in women. This is likely a function of the trend toward lower role identities in more senior groups of women midshipmen in Figure 8.2. The role identity closest to statistical significance in this model, leader identity, is the only identity that increases across groups of women with more time in the organization. As they become more senior, women midshipmen may see themselves more as leaders, but they may not see adequate opportunities for leadership in the military.

In addition, wave 1 work beliefs emerge as a significant negative predictor of career orientations in women while wave 2 work beliefs are positive in the third stage of the model. These conflicting results may be the result of reductions in work beliefs of women from wave 1 to wave 2 and the restricted range of this sample of women midshipmen or as a result of the correlation between the wave 1 and wave 2 measures. The last significant predictor of military career orientations in women is wave 1 social

altruism job values, but the coefficient is negative. The wave 2 social altruism values for women increase as in the overall model, but fail to reach statistical significance in this model, which is likely the result of the overall decrease in this measure from wave 1 to wave 2 and the smaller sample size.

**Table 9.8 Multiple Regression: Military Career Expectations of Women at Wave 2, USNA Midshipmen**

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>d</sup>
	b		Beta		
<b>1</b> (Constant)	2.145	1.065		2.015	.046
DEMOG_Minority	.013	.146	.007	.088	.930
DEMOG_Father's Education Level	-.029	.068	-.039	-.424	.672
DEMOG_Mother's Education Level	-.010	.077	-.013	-.134	.893
DEMOG_Mother Paid Job When R Young	.059	.052	.090	1.145	.254
DEMOG_Prep School	-.268	.177	-.131	-1.515	.132
DEMOG_Military Service (MIDN)	.283	.321	.070	.884	.378
DEMOG_Summer Seminar Attendee	.019	.125	.012	.149	.881
DEMOG_Military Parent	.152	.096	.125	1.587	.115
DEMOG_USNA Legacy	-.400	.257	-.126	-1.552	.123
DEMOG_Total SAT	-.001	.001	-.097	-1.060	.291
Job Values (Extrinsic) Scale wave 1	.226	.097	.196	2.334	.021*
Job Values (Influence) Scale wave 1	-.035	.114	-.027	-.305	.761
Job Values (Intrinsic) Scale wave 1	.231	.189	.124	1.222	.224
Job Values (Leisure) Scale wave 1	-.395	.117	-.345	-3.366	.001***
Job Values (Security) Scale wave 1	-.121	.100	-.110	-1.211	.228
Job Values (Social Altruism) Scale wave 1	.022	.119	.017	.185	.853
Work Beliefs Scale wave 1	-.075	.106	-.071	-.710	.479
Military as a Place to Work wave 1	.222	.101	.185	2.207	.029*
Military Opportunity Scale wave 1	.104	.098	.087	1.057	.293
<b>2</b> (Constant)	2.566	1.138		2.256	.026
DEMOG_Minority	.019	.147	.011	.126	.900
DEMOG_Father's Education Level	-.021	.070	-.028	-.303	.763
DEMOG_Mother's Education Level	.001	.079	.001	.007	.995
DEMOG_Mother Paid Job When R Young	.065	.052	.099	1.247	.215
DEMOG_Prep School	-.291	.183	-.142	-1.588	.115
DEMOG_Military Service (MIDN)	.253	.325	.063	.778	.438
DEMOG_Summer Seminar Attendee	-.006	.127	-.004	-.044	.965
DEMOG_Military Parent	.129	.097	.106	1.327	.187
DEMOG_USNA Legacy	-.432	.259	-.136	-1.670	.097
DEMOG_Total SAT	-.001	.001	-.111	-1.189	.237
Job Values (Extrinsic) Scale wave 1	.187	.100	.162	1.868	.064
Job Values (Influence) Scale wave 1	-.027	.114	-.021	-.233	.816
Job Values (Intrinsic) Scale wave 1	.174	.193	.093	.901	.369
Job Values (Leisure) Scale wave 1	-.390	.119	-.341	-3.287	.001***
Job Values (Security) Scale wave 1	-.087	.103	-.078	-.842	.401
Job Values (Social Altruism) Scale wave 1	.024	.119	.018	.201	.841
Work Beliefs Scale wave 1	-.070	.107	-.066	-.657	.513

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>d</sup>
	b	Error	Beta		
Military as a Place to Work wave 1	.219	.102	.183	2.158	.033*
Military Opportunity Scale wave 1	.132	.102	.110	1.291	.199
DEMOG_Varsity Sport Leader	-.042	.083	-.042	-.509	.611
DEMOG_Major Group	.000	.091	.000	-.002	.998
Underclass or Upperclass	-.185	.130	-.122	-1.421	.158
<b>3</b> (Constant)	1.402	1.106		1.268	.207
DEMOG_Minority	.040	.140	.023	.286	.776
DEMOG_Father's Education Level	-.054	.069	-.073	-.793	.429
DEMOG_Mother's Education Level	.015	.075	.019	.205	.838
DEMOG_Mother Paid Job When R Young	.035	.050	.053	.708	.480
DEMOG_Prep School	-.208	.172	-.102	-1.206	.230
DEMOG_Military Service (MIDN)	.251	.318	.062	.788	.432
DEMOG_Summer Seminar Attendee	-.105	.123	-.069	-.855	.394
DEMOG_Military Parent	.181	.094	.149	1.929	.056
DEMOG_USNA Legacy	-.535	.255	-.168	-2.096	.038*
DEMOG_Total SAT	-.001	.001	-.080	-.894	.373
Job Values (Extrinsic) Scale wave 1	.252	.131	.218	1.924	.057
Job Values (Influence) Scale wave 1	-.025	.119	-.019	-.207	.836
Job Values (Intrinsic) Scale wave 1	.338	.214	.181	1.579	.117
Job Values (Leisure) Scale wave 1	-.206	.140	-.180	-1.467	.145
Job Values (Security) Scale wave 1	-.128	.108	-.115	-1.187	.237
Job Values (Social Altruism) Scale wave 1	-.324	.158	-.248	-2.055	.042*
Work Beliefs Scale wave 1	-.258	.127	-.242	-2.026	.045*
Military as a Place to Work wave 1	.161	.099	.134	1.623	.107
Military Opportunity Scale wave 1	.116	.101	.097	1.157	.250
DEMOG_Varsity Sport Leader	.003	.078	.003	.039	.969
DEMOG_Major Group	-.026	.086	-.024	-.300	.765
Upperclass or Underclass	-.171	.124	-.112	-1.380	.170
Job Values (Extrinsic) Scale wave 2	-.113	.138	-.094	-.821	.414
Job Values (Influence) Scale wave 2	-.205	.139	-.154	-1.479	.142
Job Values (Intrinsic) Scale wave 2	-.008	.214	-.004	-.037	.970
Job Values (Leisure) Scale wave 2	-.164	.159	-.137	-1.031	.304
Job Values (Security) Scale wave 2	.151	.115	.137	1.318	.190
Job Values (Social Altruism) Scale wave 2	.349	.185	.241	1.886	.062
Military Service Important to R wave 2	.272	.071	.342	3.836	.000***
Work Beliefs Scale wave 2	.314	.134	.290	2.347	.021*
Leader Identity Salience wave 2	-.141	.079	-.138	-1.781	.077
Midshipman Identity Salience wave 2	.032	.075	.036	.434	.665
Officer Identity Salience wave 2	.013	.062	.016	.209	.834
Service Identity Salience wave 2	-.151	.127	-.093	-1.188	.237

a Dependent Variable: Military Career Expectations wave 2

b Selecting only cases for which DEMOG\_Gender = FEMALE:(1)

c R<sup>2</sup> (Model-1) = .289, adj. R<sup>2</sup> = .190, F(19, 136) = 2.910, p < .001;

R<sup>2</sup> (Model-2) = .302, adj. R<sup>2</sup> = .187, F(22, 133) = 2.615, p < .001;

R<sup>2</sup> (Model-3) = .476, adj. R<sup>2</sup> = .328, F(34, 121) = 3.228, p < .001 (N = 156)

d \* = p ≤ .05, \*\* = p ≤ .01, \*\*\* = p ≤ .001



In Table 9.9, the military career expectations of midshipmen categorized as members of a minority group are predicted using the organizational socialization model. In the first stage of this model, three variables emerge as positive predictors of career expectations. Similar to the two previous models, increases in the evaluation of the military as a place to work and increasing scores on the military opportunity scale influence career expectations. Minority midshipmen with parents who served in the military significantly predicts more certain military career plans just as it did in the first stage of the model in Table 9.7. The overall explained variance in this stage of the model, represented by adjusted  $R^2$  is .150 ( $p < .001$ ).

In the second stage of the model, none of the environment variables emerge as statistically significant predictors of career expectations and the adjusted  $R^2$  decreases to .145 ( $p = .001$ ). However, the three significant predictors of career expectations from the first stage of the model remain significant in the second stage. As in the model for women, the lack of a significant increase in explained variance for minority status may be related to the small number of minorities in the sample as well as the larger minority group effect.

In the third stage of the model, wave 2 orientations of minority group midshipmen are included and the adjusted  $R^2$  of the model doubles to .309 ( $p < .001$ ). Parental military status is the only predictor that remains statistically significant throughout the model. This prior socialization variable was found to be influential in the prediction of military career plans for the overall sample and approached significance in the model for women as well. Parental work experiences appear to be just as important to the plans and orientations of youth today as they were many years ago (Kohn and Schooler 1969). In

addition, wave 2 leisure job values emerge as a negative predictor of military career expectations for minority midshipmen, as it did in the general model of midshipmen career expectations.

**Table 9.9 Multiple Regression: Military Career Expectations of Minorities at Wave 2, USNA Midshipmen**

Model <sup>a,b,c</sup>	Unstandardized	Std. Error	Standardized	t	Sig. <sup>d</sup>
	Coefficients		Coefficients		
	b		Beta		
<b>1</b> (Constant)	.402	.905		.444	.658
DEMOG_Father's Education Level	-.010	.047	-.020	-.214	.830
DEMOG_Mother's Education Level	-.026	.048	-.049	-.542	.588
DEMOG_Mother Paid Job When R Young	.017	.045	.028	.384	.702
DEMOG_Prep School	-.105	.124	-.075	-.852	.395
DEMOG_Military Service (MIDN)	.073	.190	.030	.384	.701
DEMOG_Summer Seminar Attendee	.175	.105	.125	1.662	.098
DEMOG_Military Parent	.211	.090	.178	2.336	.021*
DEMOG_USNA Legacy	.261	.238	.085	1.099	.273
DEMOG_Total SAT	.000	.001	-.036	-.428	.669
Job Values (Extrinsic) Scale wave 1	.053	.089	.049	.589	.556
Job Values (Influence) Scale wave 1	.120	.099	.107	1.211	.228
Job Values (Intrinsic) Scale wave 1	-.009	.164	-.005	-.052	.958
Job Values (Leisure) Scale wave 1	-.115	.109	-.109	-1.058	.292
Job Values (Security) Scale wave 1	.068	.087	.072	.785	.434
Job Values (Social Altruism) Scale wave 1	-.080	.105	-.068	-.763	.447
Work Beliefs Scale wave 1	.149	.086	.146	1.732	.085
Military as a Place to Work wave 1	.236	.085	.215	2.769	.006**
Military Opportunity Scale wave 1	.180	.076	.180	2.360	.019*
DEMOG_Gender	-.117	.125	-.069	-.930	.354
<b>2</b> (Constant)	.695	.974		.714	.476
DEMOG_Father's Education Level	-.010	.048	-.020	-.214	.831
DEMOG_Mother's Education Level	-.010	.050	-.020	-.210	.834
DEMOG_Mother Paid Job When R Young	.028	.045	.045	.614	.540
DEMOG_Prep School	-.109	.125	-.078	-.878	.381
DEMOG_Military Service (MIDN)	.031	.195	.013	.157	.876
DEMOG_Summer Seminar Attendee	.143	.109	.102	1.320	.189
DEMOG_Military Parent	.193	.091	.163	2.112	.036*
DEMOG_USNA Legacy	.284	.242	.092	1.172	.243
DEMOG_Total SAT	.000	.001	-.059	-.680	.497
Job Values (Extrinsic) Scale wave 1	.027	.092	.025	.297	.767
Job Values (Influence) Scale wave 1	.106	.100	.095	1.056	.293
Job Values (Intrinsic) Scale wave 1	-.003	.165	-.002	-.017	.986
Job Values (Leisure) Scale wave 1	-.112	.110	-.106	-1.022	.309
Job Values (Security) Scale wave 1	.088	.089	.093	.992	.323
Job Values (Social Altruism) Scale wave 1	-.088	.106	-.075	-.830	.408
Work Beliefs Scale wave 1	.162	.087	.158	1.854	.066
Military as a Place to Work wave 1	.217	.088	.199	2.463	.015*
Military Opportunity Scale wave 1	.179	.079	.179	2.283	.024*
DEMOG_Gender	-.089	.128	-.053	-.692	.490

Model <sup>a,b,c</sup>	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig. <sup>d</sup>
	b		Beta		
DEMOG_Varsity Sport Leader	-.096	.082	-.098	-1.174	.242
DEMOG_Major Group	.022	.076	.024	.290	.772
Underclass or Upperclass	-.084	.109	-.061	-.774	.440
<b>3</b> (Constant)	.264	.925		.286	.775
DEMOG_Father's Education Level	-.033	.046	-.064	-.727	.469
DEMOG_Mother's Education Level	.031	.047	.057	.656	.513
DEMOG_Mother Paid Job When R Young	.038	.043	.061	.868	.387
DEMOG_Prep School	-.050	.116	-.035	-.430	.668
DEMOG_Military Service (MIDN)	.033	.185	.014	.180	.857
DEMOG_Summer Seminar Attendee	.117	.102	.084	1.156	.250
DEMOG_Military Parent	.174	.086	.146	2.026	.045*
DEMOG_USNA Legacy	.222	.227	.072	.980	.329
DEMOG_Total SAT	.000	.000	-.027	-.346	.730
Job Values (Extrinsic) Scale wave 1	.118	.116	.109	1.019	.310
Job Values (Influence) Scale wave 1	.070	.103	.062	.673	.502
Job Values (Intrinsic) Scale wave 1	-.078	.172	-.044	-.455	.650
Job Values (Leisure) Scale wave 1	.085	.114	.080	.744	.458
Job Values (Security) Scale wave 1	.097	.097	.103	1.004	.317
Job Values (Social Altruism) Scale wave 1	-.186	.118	-.159	-1.579	.117
Work Beliefs Scale wave 1	.028	.094	.027	.296	.768
Military as a Place to Work wave 1	.034	.088	.031	.383	.702
Military Opportunity Scale wave 1	.068	.075	.068	.907	.366
DEMOG_Gender	-.101	.121	-.060	-.835	.405
DEMOG_Varsity Sport Leader	-.070	.075	-.071	-.940	.349
DEMOG_Major Group	.019	.070	.020	.266	.791
Underclass or Upperclass	-.029	.102	-.021	-.287	.775
Job Values (Extrinsic) Scale wave 2	-.141	.124	-.130	-1.134	.259
Job Values (Influence) Scale wave 2	.086	.119	.073	.719	.473
Job Values (Intrinsic) Scale wave 2	.361	.185	.220	1.954	.053
Job Values (Leisure) Scale wave 2	-.246	.120	-.230	-2.041	.043*
Job Values (Security) Scale wave 2	-.061	.098	-.069	-.625	.533
Job Values (Social Altruism) Scale wave 2	.036	.133	.031	.274	.784
Military Service Important to R wave 2	.264	.065	.345	4.071	.000***
Work Beliefs Scale wave 2	.068	.095	.068	.713	.477
Leader Identity Salience wave 2	-.054	.057	-.067	-.952	.343
Midshipman Identity Salience wave 2	.039	.056	.048	.692	.490
Officer Identity Salience wave 2	.085	.047	.125	1.789	.076
Service Identity Salience wave 2	-.067	.073	-.066	-.918	.360

a. Dependent Variable: Military Career Expectations wave 2

b. Selecting only cases for which DEMOG\_Minority = Yes:(1)

c. R<sup>2</sup> (Model-1) = .241, adj. R<sup>2</sup> = .150, F(19, 159) = 2.655, p < .001;

R<sup>2</sup> (Model-2) = .251, adj. R<sup>2</sup> = .145, F(22, 156) = 2.372, p = .001;

R<sup>2</sup> (Model-3) = .441, adj. R<sup>2</sup> = .309, F(34, 144) = 3.342, p < .001 (N = 179)

d. \* = p ≤ .05, \*\* = p ≤ .01, \*\*\* = p ≤ .001

A logistic regression analysis for the likelihood of selecting “yes” to the expectations for a military career was conducted to provide a detailed investigation of the environment and categorical variables. This model provided an assessment of how well the predictors classify midshipmen who expressed the most certain career expectations, or the odds of selecting “yes” to a military career.

In Table 9.10, stage one of the model correctly classifies 67.4 percent of the cases based on the demographic and wave 1 predictors and is a statistically significant improvement in goodness of fit (chi-square) from the stage 0 model (no predictors entered) ( $R^2 = .115$ ). The second stage of the model incorporates variables measuring certain aspects of the environment and improves the classification of cases to 71.5 percent, a statistically significant improvement in chi-square over the base model ( $R^2 = .167$ ).

The third stage of the model includes wave 2 orientations of midshipmen to predict selecting “yes” to military career expectations and improves the classification of cases to 75.6 percent correct. Similar to military work classification in Table 9.10, the classification of cases in this model improves by less than ten percent over the three stages, but the chi-square assessing goodness of fit of the third stage of the model over the base stage is statistically significant and the  $R^2$  measure of calculated variance explained in the model is .309. The model correctly classifies and significantly predicts more than 75 percent of the cases on military career selection, lending further confidence to predictions expressed in the linear regression models in the previous three tables.

**Table 9.10 Logistic Regression Classification Table: Military Career Selected at Wave 2, USNA Midshipmen**

Step <sup>a,b</sup>	Observed	Predicted		Percentage Correct
		Military Career Not Selected	Military Career Selected	
<b>0<sup>c</sup></b>	Military Career	Military Career Not Selected		
		Selected	457	100.0
		Military Career Selected	386	.0
		Overall Percentage		54.2
<b>1<sup>d</sup></b>	Military Career	Military Career Not Selected		
		Selected	329	72.0
		Military Career Selected	147	61.9
		Overall Percentage		67.4
<b>2<sup>e</sup></b>	Military Career	Military Career Not Selected		
		Selected	346	75.7
		Military Career Selected	129	66.6
		Overall Percentage		71.5
<b>3<sup>f</sup></b>	Military Career	Military Career Not Selected		
		Selected	353	77.2
		Military Career Selected	102	73.6
		Overall Percentage		75.6

a. Constant is included in the model.

b. The cut value for each step is .500

c. Step 0: Initial -2LL = 1162.659 (N = 843)

d. Step 1: -2LL = 1029.210, Chi-square = 133.449 (df = 21,  $p < .001$ ),  $R^2 = .115$

e. Step 2: -2LL = 968.518, Chi-square = 194.141 (df = 55,  $p < .001$ ),  $R^2 = .167$

f. Step 3: -2LL = 844.035, Chi-square = 318.624 (df = 67,  $p < .001$ ),  $R^2 = .309$

From the previous table, the goodness of fit and classification of cases in the logistic regression analysis provide confidence that the organizational socialization model helps to predict military career. Table 9.11 presents the coefficients and predicted odds of selecting a military career at wave 2 for the organizational socialization model and allows an assessment of the relative influence of individual predictor variables. In the first stage of this model, coefficients and predicted odds are statistically significant for midshipmen having at least one military parent, wave 1 leisure job values, wave 1 work beliefs, evaluation of the military as an acceptable place to work, and the military opportunity scale. With the exception of gender, the significant stage one results are identical to those in the OLS regression model in Table 9.7.

In stage two of the model, the environment variables are added and all of the predictors from the first stage of the model remain statistically significant predictors of career selection as in the OLS regression model. The company of a midshipman significantly predicts the selection of military career in two specific instances, but as previously noted, the small number of midshipmen in several of the categories makes interpretation difficult. Unlike the choice of military work at 30 in Table 9.5, membership in more than half of the midshipman companies increases the predicted odds of selecting a military career however, none of the companies that significantly predicted the selection of military work at age 30 are significant predictors in this model of long-term career plans. Similar to the OLS model, being an upperclass midshipman reduces the predicted odds of selecting a military career by 65%. In addition, major group is not a significant predictor of selecting a military career as it was in the OLS model, but the predicted odds of selecting a military career increase between the non-technical and technical major categories.

In the final stage of this model, wave 2 measures are included and status as an upperclass or underclass midshipman and the evaluation of the military as a place to work serve as the only significant predictor variables remaining from the previous stage of the model. As in the OLS regression model, midshipmen who value freedom and leisure are less likely to say they will have a career in the military, while midshipmen who believe that military service is important increase the odds that they say they will have a military career. Finally, the military role identity measures predict career selection in a similar manner to the OLS regression model. Midshipmen who have a higher leader identity are 20% less likely to say they will have a career in the military while those who express a

stronger officer identity are 37% more likely. Absent from this model, however, is the influence of work beliefs on career plans found in Table 9.5 which may be a function of the negative skew in the distribution of the work beliefs variable.

**Table 9.11 Logistic Regression Variables: Military Career Selected at Wave 2, USNA Midshipmen**

Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			
<b>1<sup>b</sup></b>					
DEMOG_Gender (1)	-.279	.213	1.709	.191	.757
DEMOG_Minority (1)	-.107	.203	.275	.600	.899
DEMOG_Father's Education Level	-.052	.082	.395	.529	.950
DEMOG_Mother's Education Level	-.013	.086	.023	.879	.987
DEMOG_Mother Paid Job When R Young	.049	.067	.529	.467	1.050
DEMOG_Prep School (1)	-.333	.233	2.032	.154	.717
DEMOG_Military Service (MIDN) (1)	.234	.340	.475	.491	1.264
DEMOG_Summer Seminar Attendee (1)	.088	.163	.293	.588	1.092
DEMOG_Military Parent			5.444	.066	
DEMOG_Military Parent (1)	.409	.176	5.387	.020*	1.505
DEMOG_Military Parent (2)	.074	.377	.039	.844	1.077
DEMOG_USNA Legacy	-.084	.311	.072	.788	.920
DEMOG_Total SAT	-.001	.001	.948	.330	.999
Job Values (Extrinsic) Scale wave 1	.079	.133	.354	.552	1.082
Job Values (Influence) Scale wave 1	.035	.152	.053	.819	1.036
Job Values (Intrinsic) Scale wave 1	.138	.239	.336	.562	1.148
Job Values (Leisure) Scale wave 1	-.374	.160	5.450	.020*	.688
Job Values (Security) Scale wave 1	-.047	.135	.122	.727	.954
Job Values (Social Altruism) Scale wave 1	.073	.161	.204	.651	1.075
Work Beliefs Scale wave 1	.333	.136	6.007	.014*	1.395
Military as a Place to Work wave 1	.679	.149	20.852	.000***	1.971
Military Opportunity Scale wave 1	.461	.131	12.367	.000***	1.585
Constant	-4.333	1.438	9.077	.003	.013
<b>2<sup>c</sup></b>					
DEMOG_Gender (1)	-.308	.226	1.855	.173	.735
DEMOG_Minority (1)	-.144	.221	.420	.517	.866
DEMOG_Father's Education Level	.008	.088	.009	.924	1.008
DEMOG_Mother's Education Level	-.026	.090	.080	.777	.975
DEMOG_Mother Paid Job When R Young	.058	.071	.652	.419	1.059
DEMOG_Prep School (1)	-.474	.248	3.650	.056	.622
DEMOG_Military Service (MIDN) (1)	.307	.365	.705	.401	1.359
DEMOG_Summer Seminar Attendee (1)	.078	.174	.200	.655	1.081
DEMOG_Military Parent			4.743	.093	
DEMOG_Military Parent (1)	.409	.188	4.740	.029*	1.505
DEMOG_Military Parent (2)	.136	.391	.121	.728	1.145
DEMOG_USNA Legacy	-.077	.328	.056	.814	.926
DEMOG_Total SAT	-.001	.001	1.941	.164	.999
Job Values (Extrinsic) Scale wave 1	.043	.142	.092	.762	1.044
Job Values (Influence) Scale wave 1	.018	.161	.013	.909	1.019
Job Values (Intrinsic) Scale wave 1	.099	.253	.154	.695	1.105
Job Values (Leisure) Scale wave 1	-.431	.172	6.283	.012*	.650

Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
Job Values (Security) Scale wave 1	.014	.145	.010	.921	1.015
Job Values (Social Altruism) Scale wave 1	.119	.172	.478	.489	1.127
Work Beliefs Scale wave 1	.289	.144	4.004	.045*	1.335
Military as a Place to Work wave 1	.715	.158	20.476	.000***	2.044
Military Opportunity Scale wave 1	.421	.140	9.042	.003**	1.523
DEMOG_Varsity Sport Leader			.465	.793	
DEMOG_Varsity Sport Leader (1)	-.121	.185	.427	.514	.886
DEMOG_Varsity Sport Leader (2)	-.006	.269	.001	.981	.994
DEMOG_Major Group (Undeclared)			.385	.825	
Major Group (Non-Technical)	.179	.356	.253	.615	1.196
Major Group (Technical/Engineering)	.205	.332	.382	.536	1.228
Company			31.154	.358	
Company	.185	.413	.201	.654	1.203
Company	-.544	.523	1.078	.299	.581
Company	-.669	.464	2.080	.149	.512
Company	-.750	.504	2.215	.137	.472
Company	-.935	.721	1.684	.194	.392
Company	.012	.426	.001	.978	1.012
Company	.257	.440	.342	.559	1.293
Company	.444	.415	1.141	.285	1.559
Company	.968	.500	3.755	.053	2.633
Company	.018	.466	.001	.969	1.018
Company	-.378	.445	.719	.397	.686
Company	.411	.495	.689	.407	1.508
Company	-.011	.374	.001	.977	.989
Company	.235	.352	.447	.504	1.265
Company	.021	.364	.003	.954	1.021
Company	-.243	.436	.312	.577	.784
Company	-.130	.409	.101	.750	.878
Company	.179	.362	.245	.620	1.196
Company	.601	.351	2.939	.086	1.825
Company	.144	.424	.116	.733	1.155
Company	.284	.503	.320	.572	1.329
Company	-.045	.380	.014	.905	.956
Company	.931	.463	4.046	.044*	2.537
Company	-.001	.369	.000	.997	.999
Company	-1.378	.532	6.706	.010**	.252
Company	.760	.506	2.258	.133	2.139
Company	-.231	.444	.271	.603	.794
Company	.145	.501	.084	.772	1.156
Company	-.476	.463	1.053	.305	.622
Underclass or Upperclass (1)	-.809	.180	20.121	.000***	.445
Constant	-2.589	1.603	2.609	.106	.075
<b>3<sup>d</sup></b> DEMOG_Gender (1)	-.221	.254	.760	.383	.801
DEMOG_Minority (1)	-.151	.240	.396	.529	.860
DEMOG_Father's Education Level	-.061	.097	.398	.528	.940
DEMOG_Mother's Education Level	.027	.100	.074	.785	1.028
DEMOG_Mother Paid Job When R Young	.082	.078	1.094	.296	1.086
DEMOG_Prep School (1)	-.412	.270	2.318	.128	.663



Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
DEMOG_Military Service (MIDN) (1)	.114	.417	.075	.784	1.121
DEMOG_Summer Seminar Attendee (1)	-.004	.193	.000	.984	.996
DEMOG_Military Parent			2.658	.265	
DEMOG_Military Parent (1)	.336	.206	2.658	.103	1.399
DEMOG_Military Parent (2)	.129	.428	.091	.763	1.138
DEMOG_USNA Legacy	.123	.370	.111	.739	1.131
DEMOG_Total SAT	-.001	.001	.366	.545	.999
Job Values (Extrinsic) Scale wave 1	-.025	.216	.014	.907	.975
Job Values (Influence) Scale wave 1	-.311	.207	2.262	.133	.732
Job Values (Intrinsic) Scale wave 1	.229	.307	.557	.455	1.257
Job Values (Leisure) Scale wave 1	-.005	.218	.000	.982	.995
Job Values (Security) Scale wave 1	.083	.178	.216	.642	1.087
Job Values (Social Altruism) Scale wave 1	-.120	.228	.279	.597	.887
Work Beliefs Scale wave 1	.021	.181	.014	.906	1.022
Military as a Place to Work wave 1	.392	.175	4.994	.025*	1.480
Military Opportunity Scale wave 1	.287	.156	3.402	.065	1.332
DEMOG_Varsity Sport Leader			.714	.700	
DEMOG_Varsity Sport Leader (1)	-.030	.204	.021	.884	.971
DEMOG_Varsity Sport Leader (2)	.220	.300	.539	.463	1.246
DEMOG_Major Group (Undeclared)			1.482	.477	
Major Group (Non-Technical)	.267	.388	.473	.492	1.306
Major Group (Technical/Engineering)	.404	.365	1.226	.268	1.498
Company			29.845	.422	
Company	.532	.475	1.255	.263	1.702
Company	-.362	.582	.386	.534	.697
Company	-.857	.524	2.677	.102	.424
Company	-.947	.551	2.957	.085	.388
Company	-.507	.821	.381	.537	.602
Company	.173	.462	.140	.708	1.188
Company	.236	.477	.245	.620	1.267
Company	.001	.457	.000	.999	1.001
Company	.982	.518	3.588	.058	2.669
Company	.148	.511	.084	.772	1.160
Company	-.624	.482	1.678	.195	.536
Company	.394	.542	.528	.467	1.483
Company	-.147	.408	.130	.718	.863
Company	.017	.396	.002	.965	1.017
Company	-.124	.407	.093	.761	.883
Company	-.319	.497	.412	.521	.727
Company	.105	.466	.051	.821	1.111
Company	.102	.398	.065	.799	1.107
Company	.539	.384	1.971	.160	1.715
Company	.221	.464	.226	.634	1.247
Company	.269	.530	.258	.612	1.309
Company	.088	.407	.047	.829	1.092
Company	.919	.497	3.426	.064	2.507
Company	.032	.407	.006	.937	1.033
Company	-1.530	.589	6.751	.009**	.217
Company	1.116	.579	3.718	.054	3.052

Step <sup>a</sup>	Unstandardized Coefficients		Wald	Sig.	Predicted Odds
	B	Std. Error			Exp(B)
Company	-.200	.463	.186	.666	.819
Company	.053	.558	.009	.924	1.055
Company	-.444	.526	.712	.399	.642
Underclass or Upperclass (1)	-.803	.202	15.815	.000***	.448
Job Values (Extrinsic) Scale wave 2	.065	.227	.081	.776	1.067
Job Values (Influence) Scale wave 2	.211	.206	1.051	.305	1.235
Job Values (Intrinsic) Scale wave 2	.148	.308	.229	.632	1.159
Job Values (Leisure) Scale wave 2	-.619	.241	6.607	.010**	.538
Job Values (Security) Scale wave 2	-.182	.184	.980	.322	.833
Job Values (Social Altruism) Scale wave 2	.416	.231	3.251	.071	1.516
Work Beliefs Scale wave 2	.150	.191	.615	.433	1.161
Military Service Important to R wave 2	.813	.127	41.163	.000***	2.255
Leader Identity Salience wave 2	-.224	.106	4.485	.034*	.799
Midshipman Identity Salience wave 2	.062	.110	.318	.573	1.064
Officer Identity Salience wave 2	.313	.093	11.445	.001***	1.368
Service Identity Salience wave 2	.278	.145	3.684	.055	1.320
Constant	-4.369	1.843	5.619	.018	.013

a. Step 0 Step 0: Initial -2LL = 1162.659 (N = 843)

b. Step 1: -2LL = 1029.210, Chi-square = 133.449 (df = 21,  $p < .001$ ),  $R^2 = .115$

c. Step 2: -2LL = 968.518, Chi-square = 194.141 (df = 55,  $p < .001$ ),  $R^2 = .167$

d. Step 3: -2LL = 844.035, Chi-square = 318.624 (df = 67,  $p < .001$ ),  $R^2 = .309$

### Work Beliefs, Role Identity Salience, and Predicted Organizational Outcomes

Throughout this study, a central concern has been the relationship between the work beliefs and role identity salience of midshipmen and the influence of these variables on organizational outcomes. In Figure 4.2, this study hypothesized that strong work beliefs and high midshipman role identity salience would result in the most positive organizational outcomes. In the preceding results sections, work beliefs were significant predictors of several organizational outcomes. However, instead of the midshipman role identity predicting organizational outcomes, the future military officer role identity influenced organizational outcomes in several instances. As a result, the final research question was evaluated in terms of the relationship between work beliefs, officer role identity, and the military work selection, job satisfaction, and career expectations of midshipmen.

A proposed structure for work beliefs and officer identity was applied to the data using cluster analysis techniques to form a 2 x 2 taxonomy of midshipmen with either strong or weak wave 2 work beliefs and whether or not they selected the officer role identity at wave 2. Cluster analysis is typically an exploratory technique and the primary goal in this case is to separate respondents into different groups based on characteristics specified in the cluster variate (Hair et al. 1998). For this test however, the classification of midshipmen was conducted by using the typology proposed by Kraimer (1997) and depicted in Figure 3.3. In that typology, different levels of congruence with organizational values and work beliefs were theorized to produce different organizational outcomes. In this study, different levels of officer role identity salience and work beliefs are hypothesized to have differing effects on military organizational outcomes.

The cluster analysis was conducted on data at wave 2 of the MAS since that was the only instrument where the military role identity measures were administered to all respondents. Four clusters were specified in the analysis and the statistical program generated the groups with characteristics and group centriods described in Figure 9.1. Cluster 1 includes midshipmen who selected officer role identity and have strong work beliefs, while midshipmen who did not select the officer identity and who have weak work beliefs are in cluster 2. Cluster 3 includes respondents who selected the officer identity and who have weak work beliefs, while cluster 4 included midshipmen without the officer identity but who have strong work beliefs. In other words, group or cluster 1 is the High/Strong category, group 2 is Low/Weak, group 3 is High/Weak, and group 4 is Low/Strong. The two by two matrix in Figure 9.1 shows that the group centriods for work beliefs are not completely dichotomized along a continuum of strong and weak

beliefs. However, for relative comparisons between and among different cells in the matrix, the distribution of work beliefs is satisfactory. In cluster analysis, absent any theoretical orientation, the outcomes are not generalizable to larger populations (Hair et al. 1998). The use of Kraimer's (1997) model of value congruence and work beliefs in this case allows the generalizability to other military training and education contexts and even to other organizational and professional socialization settings.

**Figure 9.1 Cluster Analysis Classification of Midshipmen by Officer Role Identity and Work Beliefs at Wave 2**

		Work Beliefs	
		Weak	Strong
Officer Identity	Selected (1)	<ul style="list-style-type: none"> <li>•Cluster 3 (N=157)</li> <li>•Officer Identity = 1</li> <li>•Work Beliefs = 3.35</li> </ul>	<ul style="list-style-type: none"> <li>•Cluster 1 (N= 220)</li> <li>•Officer Identity = 1</li> <li>•Work Beliefs = 4.52</li> </ul>
	Not Selected (0)	<ul style="list-style-type: none"> <li>•Cluster 2 (N=210)</li> <li>•Officer Identity = 0</li> <li>•Work Beliefs = 2.84</li> </ul>	<ul style="list-style-type: none"> <li>•Cluster 4 (N= 386)</li> <li>•Officer Identity = 0</li> <li>•Work Beliefs = 3.94</li> </ul>

A comparison of means for the three organizational outcome variables was conducted using the four midshipmen clusters as the grouping variable. The occupational selection at age 30 variable was already dichotomized for the selection of military work and provided an indication of near term occupational plans. The long-term military career expectations outcome variable was dichotomized between midshipmen who selected yes to a military career and all others in order to highlight midshipmen in each cluster who were most certain in their career plans. The job satisfaction measure was assessed for only those midshipmen who selected military work at age 30 (termed

military job satisfaction). The means in the work and career selection groups are the percentage of respondents in that cluster who indicated they would be in the military at age 30 or who planned to make a career of the military. In addition, the individual outcome measures of academic and military performance and midshipman leadership involvement were tested for group differences by cluster, although they were not originally included in the predictions. In Table 9.12, ANOVA testing of the clusters on organizational outcomes is presented.

Large and significant differences emerge between role identity/work belief groups on occupational choice at 30. More than 70% of the midshipmen who had high officer identity and strong work belief expressed near-term plans for military work, while more than 63% of midshipmen with high officer role identity and weak work beliefs plan to be in the military at age 30. The lowest percentage of midshipmen with near-term plans for military work is the low/weak group at 33%, while midshipmen with low officer role identity but strong work beliefs are split with about 50% of them saying they will be in the military at age 30. For work beliefs, the predictions in the 2 x 2 matrix in Figure 4.2 are largely accurate except for a possible change in group 4 (the low/strong group) from *No Military Job at 30* to *Uncertain Military Job at 30* to reflect the even split in this group.

For military job satisfaction, there are again large and significant differences between groups for those midshipmen who see themselves in the military at age 30. By far, midshipmen who have high officer role identity and strong work beliefs believe they will be most satisfied with this work, while those midshipmen in the low/weak group see themselves as least satisfied. Midshipmen in this group probably have many reasons for

remaining in the military other than feeling satisfied with the work. The low/strong group has the second highest mean expectations that they will be satisfied with military work at age 30. As noted in the regression analysis section, individuals with strong work beliefs are likely to choose an occupation where they feel they will be able engage in important and challenging work. This group feels they will be satisfied with military work not because they have a strong identification with any specific role but because flying a jet, navigating a ship or submarine, or leading a platoon of Marines is a challenging assignment to them and work is generally important to them. These results largely correspond to the predictions in the matrix except that groups 3 and 4 could be reclassified as *Medium Job Satisfaction*.

The distinctions between groups are largest for the long-term military career plans of midshipmen and indicates the importance of both role identity salience and work beliefs in the development of occupational plans. Seventy percent of the midshipmen with high officer identity and strong work beliefs say they plan to make the military a career, while only a quarter of midshipmen in the low/weak group have such long-term plans. For midshipmen in group 3, high officer role identity salience is not sufficient to cause a majority of them to make a long-term work commitment for military service while the midshipmen in group 4, having only strong work beliefs, lack sufficient identification with the occupational roles to express a long-term commitment to the organization.

**Table 9.12 Analysis of Variance for Officer Role Identity / Work Beliefs Groups at Wave 2, USNA Midshipmen**

		Officer Role Identity/Work Beliefs Group				F <sup>a</sup>
		Group 1: High/Strong	Group 2: Low/Weak	Group 3: High/Weak	Group 4: Low/Strong	
Military Work Selected at Age 30 (% selected military work)						
	N	219	208	157	380	
	Mean	0.71	0.33	0.63	0.49	24.96***
	SD	0.46	0.47	0.48	0.50	
Military Job Satisfaction						
	N	155	68	98	184	
	Mean	4.45	3.50	3.74	3.85	30.73***
	SD	0.70	0.91	0.74	0.84	
Military Career Expectations (% selected military career)						
	N	220	210	155	384	
	Mean	0.70	0.25	0.50	0.42	33.56***
	SD	0.46	0.44	0.50	0.49	
Fall 2004 Academic Performance						
	N	220	210	157	386	
	Mean	2.98	2.87	2.93	3.03	4.10**
	SD	0.54	0.60	0.58	0.57	
Fall 2004 Military Performance						
	N	220	210	157	386	
	Mean	3.23	3.05	3.09	3.14	8.06***
	SD	0.38	0.45	0.43	0.41	
Midshipman Leadership Scale (Class of 2004 and 2005)						
	N	102	137	99	219	
	Mean	2.89	2.24	2.81	2.75	1.72
	SD	2.67	2.47	2.57	2.54	

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In post hoc analysis, the overall mean officer role identity salience for midshipmen in group 3 was higher than that in group 1, but remained relatively constant across the four academic classes. In group 1, the salience of the officer role identity was least for Plebes and greatest for the two groups with service obligations and the most

amount of time in the organization.<sup>47</sup> Again, these results confirm the predictions in Figure 4.2, with the exception that the career plans of group 2 should be reclassified from *Uncertain Military Career* to *No Military Career*. In summary, neither role identity salience nor strong work beliefs alone motivate the necessary commitment to the organization to express, with certainty, plans to make a career of the military. The mean results of the hypothesized organizational outcomes are depicted in Figure 9.2.

**Figure 9.2 Mean Organizational Outcomes at Wave 2 by Role Identity / Work Belief Group, USNA Midshipmen**

		Work Beliefs	
		Weak	Strong
Officer Identity	Selected (1)	•Military Job at 30 (%) 0.63	•Military Job at 30 (%) 0.71
		•Job Satisfaction 3.74	•Job Satisfaction 4.45
		•Military Career (%) 0.50	•Military Career (%) 0.70
	Not Selected (0)	•Military Job at 30 (%) 0.33	•Military Job at 30 (%) 0.49
		•Job Satisfaction 3.50	•Job Satisfaction 3.85
		•Military Career (%) 0.25	•Military Career (%) 0.42

Similar, but not identical patterns emerge in Table 9.12 when the role identity/work belief groups are compared on the individual measures associated with performance in the organization. For academic performance, group 4 had the highest cumulative grade point average after the Fall 2004 semester, followed closely by group 1.

<sup>47</sup> Group 1 mean future military officer salience by academic class: 2007 = 1.36; 2006 = 1.45; 2005 = 1.77; and 2004 = 1.72. Group 3 mean future military officer role identity salience by academic class: 2007 = 1.85; 2006 = 1.80; 2005 = 1.73; and 2004 = 1.80.



The small difference between these two groups may be related to midshipmen with the officer role identity placing less emphasis on the academic aspects of the Academy process, but clearly strong work beliefs are related to a higher work ethic and higher overall grades. At the other end of the academic spectrum, midshipmen with weak work beliefs but who hold a salient officer role identity may see academic work as a milestone to commissioning and take their work seriously. On the other hand, the midshipmen in group 2 seem to care less about the individual outcomes of the Academy and express the least positive orientations towards military work.

In Table 9.12, the role identity/work belief group patterns between midshipmen academic and military performance grades show the close association between “Athens and Sparta” at Annapolis. Midshipmen with the officer role identity and strong work beliefs have the highest military grade point average, but among midshipmen in the group 3 (high/weak group) role identity alone is not enough to secure the highest academic or military performance ratings. Midshipmen in group 4, with strong work beliefs but low role identity, have the highest academic grades and the second highest mean military performance scores at the end of the Fall 2004 semester demonstrating the importance of strong work beliefs in determining individual performance measures. The data for midshipmen leadership involvement indicates a relationship between officer role identity and leadership attainment, however the size of the sample and perhaps scale construction result in variation in the data that is too great to permit statistical significance.

Tables 8.1, 8.3, and 8.5 listed the wave 1-2 differences in the mean work beliefs, role identity salience, and military career orientations of different academic classes of midshipmen. In each of these tables, decreases in orientations were observed from wave

1 to wave 2. In similar post hoc tests of midshipmen in the role identity/work beliefs groups, significant decreases are observed for groups 1 and 4 in leisure and security job values while a significant increase occurs in the work beliefs of these two groups from wave 1 to wave 2. However, for group 4 there is also a significant decrease in military career expectations over this period. While midshipmen in groups 1 and 3 express the officer role as salient, the work beliefs for midshipmen in group 3 decrease from wave 1 to wave 2. The midshipmen in group 2, who express the least congruent orientations of any group, exhibit no significant change in their orientations from wave 1 to wave 2. Only for midshipmen in group 1 are all of the changes significant and in the direction of greater congruence. While the cluster analysis artificially grouped midshipmen on officer role identity salience and work belief strength, the other orientations associated with greater organizational congruence changed for group 1 as well.

In Table 9.13, post hoc testing of wave 1 to wave 2 means by Plebe officer role identity/work beliefs group is presented for midshipman and officer role identity, work beliefs, and military career expectations and helps inform the socialization effects associated with plebe summer indoctrination and, potentially, the entire Naval Academy experience. In the earlier tables, midshipman and officer role identities increased from wave 1 to wave 2, while the mean work beliefs and career expectations of Plebes decreased, although none of the changes were statistically significant. In role identity/work belief groups 1 and 3, there is a statistically significant increase in officer identity salience from wave 1 to wave 2 and for groups 2 and 4 the officer identity is no longer salient. The small Ns and the artificiality of the cluster analysis groups necessitate caution for these interpretations, but in the case of officer role identity, three of the four

group differences are significant. Conversely, the midshipman role identity decreases for groups 1 and 3, while it increases in groups 2 and 4, and the difference is significant for group 2, the group believed to have the least congruent organizational orientations.

**Table 9.13 Paired Differences of Means for Officer Role Identity / Work Beliefs Groups at Wave 1 and Wave 2, USNA Plebes**

		Officer Role Identity/Work Beliefs Group <sup>a</sup>			
		Group 1: High/Strong	Group 2: Low/Weak	Group 3: High/Weak	Group 4: Low/Strong
Midshipman Identity Salience					
	N	44	15	13	54
	Mean_1	1.05	0.27	0.77	0.61
	Mean_2	0.98	0.80	0.38	0.72
	Difference	0.07	-0.53	0.38	-0.11
	SD	1.45	0.83	1.19	1.00
	T	0.31	-2.48*	1.16	-0.81
Officer Identity Salience					
	N	44	15	13	54
	Mean_1	0.86	0.13	0.62	0.39
	Mean_2	1.36	0.00	1.85	0.00
	Difference	-0.50	0.13	-1.23	0.39
	SD	1.37	0.35	1.17	0.83
	T	-2.42*	1.47	-3.81**	3.43***
Work Beliefs Scale					
	N	44	14	13	51
	Mean_1	4.35	3.14	3.58	4.02
	Mean_2	4.61	2.93	3.29	3.93
	Difference	-0.27	0.21	0.29	0.09
	SD	0.56	0.43	0.45	0.46
	T	-3.14**	1.88	2.29*	1.45
Military Career Expectations					
	N	44	14	11	51
	Mean_1	2.73	2.57	2.55	2.49
	Mean_2	2.80	2.50	2.18	2.45
	Difference	-0.07	0.07	0.36	0.04
	SD	0.62	0.47	0.50	0.45
	T	-0.72	0.56	2.39*	0.63

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

In addition, it appears the Plebes in group 1 entered the Academy with the highest midshipman and officer role identities and at the end of indoctrination this group held the officer role identity as most salient. Equally important, group 1 held the highest work

beliefs at the beginning of plebe summer and was the only group to experience a significant increase in mean work beliefs from wave 1 to wave 2. Although not significant, group 1 was also the only group to see an increase in long-term career expectations from wave 1 to wave 2. From data in Table 9.13, it is argued that organizational socialization occurs during the plebe summer indoctrination of newcomers to the Naval Academy and the effectiveness of such training on organizational outcomes is dependent on the strength of work beliefs and the type and level of role identity salience. These results largely support the hypothesized Model of Differential Socialization of Values and Identity in Midshipmen in Figure 4.1.

In Table 9.14, ANOVA results for group differences among women and minorities are presented. As highlighted previously, the influence of the majority male and Caucasian midshipmen at the Naval Academy is substantial and the results in Table 9.12 reflect both the overall and male/majority results. For groups of women and minority midshipmen, the cell sizes become too small for accurate analysis of the differences on satisfaction with military work at age 30 and midshipmen leadership positions and those data have been eliminated from the results.

For near-term military work plans, almost half of the women in group 1 see themselves in the military at age 30, but no other group comes close to having a majority with these plans. The pattern among these groups is not similar to the overall comparison in Table 9.12 with the exception that the highest percentage group (group 1) and lowest percentage group (group 2) are the same. Of the women with a salient officer role identity and strong work beliefs, 57% expect to have a career in the military, an unusual increase over those who think they will be in the military at age 30. This unique contrast

of near and long-term work plans, combined with the overall low percentage of women who see themselves in military work, indicates that most women midshipmen have difficulty seeing themselves in military work.

**Table 9.14 Analysis of Variance for Officer Role Identity / Work Beliefs Groups at Wave 2, USNA Women and Minority Midshipmen**

		Officer Role Identity/Work Beliefs Group				F <sup>a</sup>
		Group 1: High/Strong	Group 2: Low/Weak	Group 3: High/Weak	Group 4: Low/Strong	
Military Work Selected at Age 30 (Women Midshipmen)		N	44	31	20	71
(% selected military work)	Mean	0.48	0.16	0.35	0.39	2.81*
	SD	0.51	0.37	0.49	0.49	
Military Career Expectations (Women Midshipmen)		N	44	31	20	72
(% selected military career)	Mean	0.57	0.23	0.25	0.46	4.05**
	SD	0.50	0.43	0.44	0.50	
Military Work Selected at Age 30 (Minority Midshipmen)		N	34	39	41	78
(% selected military work)	Mean	0.65	0.31	0.66	0.49	4.44**
	SD	0.49	0.47	0.48	0.50	
Military Career Expectations (Minority Midshipmen)		N	34	39	40	80
(% selected military career)	Mean	0.71	0.28	0.50	0.38	4.44**
	SD	0.46	0.46	0.51	0.49	

a. \* =  $p \leq .05$ , \*\* =  $p \leq .01$ , \*\*\* =  $p \leq .001$

Unlike the women, group comparisons for minority midshipmen in Table 9.13 are much closer to the overall group comparisons observed in Table 9.12. For minority midshipmen, officer role identity appears to have a stronger association with near-term occupational choice than do work beliefs. Likewise, the only group of minority midshipmen that, on average, plan on a career in the military is the high/strong group, or those who exhibit the greatest congruence with organizational values.

#### Summary of Results: Research Question Four

The final section of analyses tested the relationship between the job values, work beliefs, military attitudes, and military role identities of midshipmen and their role related behaviors and near-term and long-term occupational plans. While the influence job values held by incoming midshipmen are clearly higher than civilian peers, preferences for these characteristics of work are absent in the organizational outcomes of most midshipmen. In many of the models, leisure job values were the most informative characteristics of work, but predicted less positive outcomes and reflected lower congruence with organizational goals and values. However, social altruism job values often predicted positive organizational outcomes and, in fact, may be a function of the organization's focus on sacrifice, selfless service, teamwork, and leadership.

It was originally hypothesized that midshipman role identity would be a strong predictor of organizational outcomes because of the centrality and importance of this role in the Naval Academy environment. It was expected that individuals who were either socialized or assimilated to this role would reflect the values and goals of the Naval Academy and would be most likely to choose the work for which a Naval Academy education prepared them. It was also hypothesized that any military role identity would predict more certain career orientations in midshipmen similar to the operation of a global, or overarching military identity. Instead, the future military officer role identity was the only identity measure that had such an effect in the data. In fact, the leader role identity seemed to have a negative effect on career orientations and appeared to be a secondary outcome of a Naval Academy education. If a midshipman succeeds to graduation, but lacks the value congruence to make a commitment to military work, the four years of commitment and sacrifice might not be classified as a personal and

organizational failure if they consider themselves leaders ready to serve the nation in the private and public sectors of society.<sup>48</sup> This classification also appears to fit the orientations of women midshipmen with more time in the organization. They seem to hold less certain career orientations and weaker officer role identity than their male counterparts do, but women consider themselves more as leaders as time goes on.

Work beliefs of midshipmen serve as a motivating force both within the organization and in the outward orientations of midshipmen toward military work. Strong work beliefs in midshipmen predict more positive individual and organizational outcomes and are related to an overall positive work ethic and a desire to succeed, reflected in their behavioral plans and expected satisfaction with those plans. However, the strongest predictor of occupational choice, job satisfaction, and long-term career plans in the all three models (all midshipmen, women midshipmen, minority midshipmen) is the importance of military service to the respondent. This variable appears to encompass the combined expression of higher officer identity salience and stronger work beliefs and is the single best predictor of congruence between individual and organizational values observed in the models.

From the data to this point, the issue of organizational socialization and midshipmen orientations remains only partly answered. The regression models in this study failed to uncover significant positive effects of the environment related to socialization over time. In fact, greater duration in the organization generally resulted in an overall decrease in the long-term career expectations of midshipmen. However, the long-term career plans of more senior midshipmen do not appear to be more negative

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<sup>48</sup> The phrase “Building Leaders for America” is the title of the USNA Strategic Plan (Office of the Superintendent, 2003)

than other groups of midshipmen, but merely less certain than midshipmen with less time in the organization. This may be a function of the idealism of newcomers to the organization as well as senior midshipmen preparing for the uncertainty of their future roles in the military.

As hypothesized, the two variables that emerge as the most promising measures of organizational socialization to military work, or perhaps anticipatory socialization, are officer role identity salience and work beliefs. If there is any example of socialization at work in the preceding analysis, it is reflected in the significant increase in the mean officer role identity salience expressed by Plebes in role identity/work belief groups 1 and 2 from wave 1 to wave 2. Since the officer role identity and stronger work beliefs of group 1 reflect the greatest congruence or “fit” at entry, the influence of organizational socialization at the Naval Academy may be most effective for those individuals who express initially higher role identity and/or stronger work beliefs. It may also be that strong work beliefs facilitate the growth of the officer work role identity in midshipmen and is, therefore a critical component. For instance, those First and Second Class midshipmen in group 1 (high identity/strong work beliefs), with service obligations and the longest tenure in the organization, hold more most salient officer identities than the group 1 midshipmen with less tenure in the organization. Among midshipmen in group 3 (high identity, weak work beliefs) there is little difference in the group means for role identity salience. One way to test these assertions would be through a panel study to graduation of the Class of 2007 cohort. Nonetheless, it is apparent that work role identity and work beliefs are important factors in understanding organizational socialization outcomes in Naval Academy midshipmen.



## **Chapter 10 Discussion**

This chapter begins with a discussion of the results of statistical analyses related to the specific hypotheses presented in this study. This is followed by a discussion of the relationship between the major findings in this study and the theoretical frameworks and research in the review of the literature. Limitations to the research and findings in this analysis and suggestions for future research related to this study conclude the chapter and this paper.

### **Summary of Results**

The results presented in the preceding chapters tested the following four basic concepts related to the process of organizational socialization in Naval Academy midshipmen. First, the youth who attend the Naval Academy are somehow different in their orientations and experiences from their civilian peers and through selection, self-selection, and anticipatory socialization this group of newcomers share similar orientations with each other upon entry to the organization. Second, the influence of prior experiences and orientations of midshipmen, as well as the effects of living in the organization over time significantly affect midshipmen values, beliefs, and attitudes about work and the military. Third, the type and form of indoctrination and professional training that midshipmen undergo determine, in part, their orientations and the extent to which these orientations are congruent to the goals and values of the organization. Fourth, the values, beliefs, attitudes, and role identities of midshipmen are determinants of the plans and preferences they hold for military work and midshipmen whose orientations are most congruent to the organization will express the most positive outlook and plans for military service. In addition, the central issue underlying each of the four

concepts in this study is the extent to which organizational socialization (both formal and informal) affects the outcomes of a Naval Academy education.

The tests of differences in the orientations of Plebes and civilian peers demonstrated the restricted range of the orientations newcomers bring to this organization. Not only does the extremely competitive Naval Academy selection process winnow the field of potential candidates to those deemed most likely to succeed, the very visible goals and values of the organization advertise to potential recruits what is desired in and expected of midshipmen. These actions narrow the scope of incoming individuals to either those who possess such orientations already, those who are able to adjust their orientations to fit, or those who are willing to give the organization a try. As a result, Plebes express more idealistic work orientations and more positive and pro-military attitudes than nearly every civilian comparison group. In addition, any distinctions between incoming men and women to the organization are largely absent and, in the case of the observed high midshipman role identity salience, point to the potential effects of anticipatory socialization to a new organization and a new social role.

While the statistically significant differences observed in military and civilian orientations highlight the potential influence of prior socialization experiences on midshipman orientations, several prior experience and social structural variables were found to share significant bivariate and multivariate relationships with midshipmen orientations and organizational outcomes. Parental background characteristics, including the educational attainment, work, and military service of parents, as well as organizational experience variables, such as attending the Naval Academy Summer

Seminar, prep school, or serving in the military significantly predicted the role identity salience of incoming midshipmen.

The results also show that the military role identities of midshipmen reflect the individual meanings and social contexts defined by individuals and capture differing conceptions and experiences of the organizational socialization process. As a result, it appears that midshipmen see the *service identity* as *something they have been*, the *midshipman identity* as *something they are doing*, the *leader identity* as *something they think they are*, and the *officer identity* as *something they will or hope to be*. This conceptualization helps inform why the midshipmen role identity is highest in Plebes upon assuming this new role, why service identity is best explained by past experience in the military, how the leader identity is predicted by important prior experiences, background characteristics, and time spent at the Academy and why the officer identity has the least explained variance at organizational entry. The future military officer identity is not directly associated with the socialization of new Plebes at the Naval Academy, but is the ultimate outcome of the Academy experience. That is why the officer role identity is significantly related to the other primary organizational outcome, military career orientations, and the Plebes whose orientations at entry are most congruent, or “fit” best with those of the organization express positive military work attitudes, indicate that the officer role is salient to them, and expect to make a career of the military.

Midshipmen who have been in the organization longer than the idealistic Plebes differ significantly on many orientations and appear to exhibit a trend towards greater realism. Likewise, women and minority Plebes tend to exhibit orientations similar to

other Plebes rather than other women and minority status midshipmen at the Naval Academy. While the military attitudes expressed by midshipmen with greater time in the organization are not as positive as the attitudes of newcomers to the Naval Academy, the trend for the majority males appears to stabilize as they near graduation. However, the trend for other year groups of women midshipmen appears to indicate less congruence with organizational values and goals as more time is spent there and greater homogeneity among non-minority and minority women. Finally, in the case of role identities, Plebes and those midshipmen with greater tenure at Annapolis only differ significantly on the midshipman role identity salience, which is likely a function of the anticipatory socialization of newcomers to the organization.

Significant declines are observed across many of the orientations of midshipmen from wave 1 to wave 2 and although Plebes change the most on several measures, it was hypothesized that their orientations would become more rather than less congruent to the organization at the completion of plebe summer indoctrination. The certainty of military career plans for all academic, gender, and minority status groups decreased from the beginning to the end of summer training. In fact, the career plans for midshipmen with military service obligations and the most time in the organization were lowest of all academic classes. Whether or not these trends actually exist and whether or not the causes can be attributed to the organization is largely unknown from the cross-sectional nature of the data, but suggests a similarity to the downward trends observed in the orientations of youth in transition to adulthood (Johnson and Elder 2002).

While midshipman role identity salience appears to be largely an artifact of anticipatory socialization in newcomers, the future military officer role identity stands out

as one of the strongest predictors of better congruence, or organizational “fit” and significantly predicts military occupational choice and career plans. However, the pattern of role identity salience and work beliefs observed in the larger sample does not predict military career orientations in women and minority status midshipmen in a similar manner. In addition, while officer role identity salience predicts work and career plans, role identities do not predict military job satisfaction among midshipmen who expect to be working in the military at age 30. The work beliefs, job values, and workplace attitudes of midshipmen are the strongest predictors of expected satisfaction with military work. However, midshipmen who express the most congruent orientations to the organization also appear to be those who believe military service is more important, which is another significant predictor of job satisfaction. This outcome indicates that expected job satisfaction is a reflection of more congruent orientations, but it is dictated more by the centrality of work, the importance of a particular job, and an evaluation of available rewards, than by a perception of the individual in an occupational role.

The role identity salience and work beliefs of midshipmen emerged as influential predictors in the work and career plans regression models, but the potential relationship of these variables to organizational socialization was not identified until post hoc cluster analysis of officer role identity and work belief groups. In this analysis, midshipmen who held the congruent officer role identity and strong work beliefs at wave 2 expressed the most positive organizational outcomes. In addition, for the midshipmen in the best “fitting”, or most congruent group, the mean work belief strength increased and the leisure and security job values decreased from wave 1 to wave 2, while the officer role identity of Plebes in this group became more salient from wave 1 to wave 2. Not only

does this indicate that organizational socialization might be occurring during the Academy experience, but helps identify the conditions under which the most effective socialization outcomes are predicted in midshipmen. Those conditions are strong work beliefs and a high officer role identity salience that support a belief that military service is important. In the section that follows, the results of each hypothesis test are addressed independently and the central concepts in this study are considered in light of the theory and research that informed them.

## **Principal Findings and Tests of Hypotheses**

### Civilian and Military Attitudes and Beliefs

The first research question deals with differences in civilian and military orientations as a way to assess the effects of selection, self-selection, and anticipatory socialization of incoming midshipmen at the Naval Academy. **Hypothesis ONE** states that because of these effects, *the orientations of midshipmen differ from civilian peers and incoming midshipmen value the influence rewards of work more than civilian peers, work is more central and important to them, their attitudes are more pro-military, and their orientations vary less than for civilian peers.* **Hypothesis ONE is partially confirmed.**

While not uniformly different from all groups of civilian peers on every variable of interest, this study found that Plebes differ in their orientations enough to demonstrate the self-selection effects of attending a college like the Naval Academy. The data show that the incoming midshipmen (Plebe group) in this sample differed significantly from all civilian peer groups on the extrinsic, leisure, security, social altruism, and influence job values scales, and differed from all groups except for the College/MIL group, which is the group most similar to them, on the social altruism job values scale. In addition to the

overall differences observed between midshipmen and civilian peer groups, there appears to be an effect for plans to enter the military on lower security job values and a college effect on higher social altruism job values of the youth in these samples (civilians and incoming midshipmen). The observed work beliefs of incoming midshipmen were also significantly higher and varied less than all comparison peer groups. In addition, there is an apparent college effect resulting in higher work beliefs for youth with plans to attend college and for the midshipmen actually in college. Plebes expressed more positive and pro-military attitudes than civilian peers without plans for military service (College and Neither groups) except for the two questions concerning a military draft. With the exception of the military opportunity rating, Plebes expressed more optimistic attitudes about the military than either of the two groups with military plans (College/MIL and MIL Only groups). For all of the military attitude measures, except questions about a military draft and discrimination, a military self-selection effect was observed among youth with plans for military service and for incoming midshipmen.

When comparing the orientations of incoming women midshipmen to civilian peer groups, patterns emerge by plans for military service, as well as by gender. Women Plebes rated influence job values higher and leisure job values lower than other groups of women, but did not differ significantly from the College/MIL group. The women Plebe group also rated security job values lowest, but the difference between Plebes and the College/MIL group was again the smallest. For extrinsic, intrinsic, and social altruism job values, women Plebes and the civilian comparison groups failed to differ significantly, suggesting the presence of a stronger gender effect for these youth orientations. The work beliefs of women Plebes were also higher and differed

significantly from all comparison groups except, the College/MIL group. The women with plans to attend college and women Plebes also expressed higher work beliefs than the group of women without college plans. The military attitudes of women Plebes were also more positive and pro military than groups of civilian peers. The peer group with the most similar college and career plans differed the least from women Plebes on attitudes about military work and the College group differed the most from women Plebes on nearly all of the military attitude questions. The difference between women Plebes and civilian peer groups on the extent of discrimination against women in the military was not significant. However, the peer group with the most similar college and career plans (College/MIL) to women Plebes expressed the least positive views of discrimination against African Americans and women in the military. While this group shares the military work attitudes of women Plebes, they express less positive views of the opportunity climate in the military.

**Hypothesis TWO** states that because of the effects of selection, self-selection, and anticipatory socialization, *the job values, work beliefs, and military attitudes of incoming midshipmen will vary less than civilian high school senior peer groups.*

**Hypothesis TWO is partially confirmed.**

Tests of the assumption of equal population variances indicated that Plebes exhibited significantly different variation from civilian peers on influence, intrinsic, and social altruism job values, as well as for mean work beliefs. For military attitudes, the Plebe group responses were the most uniform and differed significantly for questions where they differed the most from civilian peer groups and expressed the most positive evaluations about the military (work attitudes, military spending and influence, and social



attitudes). However, the variance differences between Plebes and civilians did not hold across all comparison groups and for all measures and the conclusion that the population variance of Plebes differs from civilians cannot be fully confirmed. However, the results do show many instances of significant variance differences and supports the general hypothesis that the orientations of Plebes differ from civilian peers.

#### Prior Experiences and Organizational Socialization

The second research question begins to address the issue of socialization of midshipmen before arriving at the Naval Academy, as well as during the years in residence at Annapolis. **Hypothesis THREE** states that *greater prior access to socialization agents that provide information about the organization results in better organizational “fit” between midshipmen and the organization, higher midshipman role identity salience, and more positive organizational outcomes.*

#### **Hypothesis THREE is partially confirmed.**

For the sample of incoming midshipmen, the relationships between orientations and prior experiences, demographics, and social structure highlight several relationships related to this hypothesis. The father’s educational attainment level and mother’s work experience when the respondent was young both share positive and significant relationships with the influence characteristics of work, while the mother’s educational attainment shares a significant relationship with higher midshipmen work beliefs. Both of these relationships point to the socialization effects of parental values and work experiences on youth orientations. The only demographic variable exhibiting a significant relationship with incoming midshipman orientations is minority category, which is positively associated with preferences for the extrinsic rewards of work.

The prior socialization variables that have significant relationships with midshipmen orientations are prior military service, which is positively related to service identity salience, and Summer Seminar attendance, which shares a negative relationship with intrinsic job values, but a positive association with officer identity salience. Two variables in particular share a greater number of significant relationships with Plebe orientations. The first, mother's work experiences when the midshipman was young is related to influence, intrinsic, and social altruism job values and the service identity salience. The second, total SAT score, shares a negative association with all job values scales and leader identity salience and a positive relationship with work beliefs and midshipman identity salience.

For midshipman identity salience, the prior experiences and orientations model explained 17% of the variance in the salience of this role identity, but there were no statistically significant individual positive predictor variables. Leisure and social altruism job values and officer identity salience were the strongest, albeit negative, predictors of midshipmen identity salience. None of the prior experiences of midshipmen in this model rose to the level of significance to positively influence midshipman identity salience and reinforces the finding that midshipman role identity in Plebes is primarily a function of anticipatory socialization to that new role. For leader identity salience, the model explains only 11% of the variance in role identity and the strongest predictor is Total SAT, although the sign of this coefficient is negative. It may be that other factors that bring individuals to the Naval Academy (i.e., athletics and prior leadership training, background, or experiences) have a stronger influence on the formation of a leader

identity in new midshipmen. For example, work beliefs and Summer Seminar attendance positively predict leader identity salience.

The prior experience model explains the greatest percentage of variance (44%) in the service identity salience of incoming midshipmen. Not surprisingly, prior military service of the respondent is the only positive predictor in the model, but it is overwhelming in the influence it extends to salience of the service identity. Leader identity salience also significantly predicts service identity salience, but the coefficient is negative. The prior experience model explains only 8% of the variance in officer identity salience, considerably less than it did in the other three military role identity models. As in previous models, the other military role identities are negative predictors of officer role identity salience and support the conclusion that midshipmen see themselves in distinct military roles rather than in multiple military roles. The model explaining officer identity salience includes two significant prior experience predictors that support the hypothesis that socialization to organizational values improves organizational “fit”. Attending the Naval Academy Summer Seminar and having at least one parent with military experience significantly predicts officer identity salience in this sample of incoming midshipmen. All of the preceding results support the finding that prior experiences provide a variety of information about the organization and help individuals frame the roles they will assume in the organization.

The prior experiences and orientations model was also used to predict career orientations of incoming midshipmen and explains 35% of the variance in the sample of Plebes. Minority status acts as a negative predictor of career expectations in this model. The two strongest predictors of career expectations were a positive evaluation of the

military as a workplace and the importance of military service as a life goal of midshipmen. The only military identity salience that positively predicts career orientations was not midshipman role identity, but officer role identity and the only prior experience variable that positively influences career orientations was the work experience of the respondent's mother. This model demonstrates that prior information helps to shape the ideas individuals have about the organization and form role identities associated with the organization, but the strongest predictors of organizational outcomes in Plebes are the attitudes and role orientations related to these outcomes.

**Hypothesis FOUR** states that *the longer midshipmen have been in the organization the more they will have been exposed to differing role models, goals, and orientations and the more realistic their orientations will have become*. This hypothesis also states that *the longer a midshipman has been in the organization and the more committed he or she becomes by incurring a service obligation, the more positive and pro-military the attitudes of those midshipmen become*. Likewise, *the more time individuals spend in the midshipmen role, the more salient the role identity becomes*.

**Hypothesis Four is partially confirmed.**

The results of analysis of variance and post hoc comparison of means showed that incoming midshipmen expressed the most idealistic job values and work beliefs of all midshipmen comparison groups, however the smallest differences among midshipman academic groups were observed in the influence and leisure job values. The small difference in influence job values between groups of midshipmen provides additional support for the earlier hypothesis that midshipmen with higher preferences for work that

involves decision-making and is difficult and challenging are either selected or self-select to the Naval Academy.

The graphic comparison of midshipmen group means shows that incoming midshipmen expressed the most idealistic orientations and the strongest work beliefs of any midshipmen group. The group means for Plebes in which idealism is represented by higher mean scores (extrinsic, intrinsic, influence, and social altruism) were higher than for other midshipmen academic classes and the Plebe group means were lower for those job values where lower mean scores represent idealistic views (leisure and security).

The general trend of the data, when plotted by academic class, shows a change from more idealistic orientations of incoming midshipmen to less idealistic, more realistic orientations expressed by midshipmen with greater time in the organization. However, the military attitudes of midshipmen with more time in the organization followed the same trend as job values and work beliefs and decreased rather than increasing as hypothesized. The Plebes and Graduating Seniors differed significantly on ratings of the military as an acceptable place to work and on the military opportunity scale, but there was no difference between these two groups in the job values that have a close association with military work (higher influence, lower leisure, and lower security). In addition, midshipmen academic classes differed significantly on midshipman role identity salience, with the Plebes expressing the most salient role identity and the First Class midshipmen expressing the least salient midshipman role identity. These findings generally support the conclusion that the orientations of midshipmen are more realistic with greater time spent in the organization, but more positive military attitudes and more

salient midshipman role identities were not observed in those midshipmen with greater organizational tenure or with a military service obligation.

**Hypothesis FIVE** states that *because of a perceived lack of organizational “fit” between women and minorities in the organization, the job values, work beliefs, military attitudes, and role identities of these midshipmen will not be as idealistic, strong, or pro-military as the dominant groups of male and Caucasian midshipmen.*

**Hypothesis FIVE is partially confirmed.**

In a similar pattern to that observed in the comparisons for all midshipmen, incoming women and minority midshipmen expressed the most idealistic job values, the highest mean work beliefs, and most positive military attitudes of all academic comparison groups. However, the academic class differences in orientations were only statistically significant for women on extrinsic job values and both military work attitude measures, while minority midshipmen differed significantly for extrinsic job values, work beliefs, and the military opportunity scale ratings. The lack of statistical significance is partly a function of the small sample size and gender and minority group differences, but in all comparison cases, there appears to be an effect on orientations by time in the organization. As in the male/Caucasian majority, the effect for women and minority midshipmen is downward rather than upward for groups of midshipmen with greater tenure in the organization.

By comparison, women Plebes rated influence job values lower and work beliefs higher than their male peers and rated the military as a more acceptable place to work. Not only did women Graduating Seniors rate the influence job values lower than the men, they also rated work beliefs, the military workplace, and military opportunity lower than

the Graduating Senior men did. While there are differences in orientations between men and women and between minority and non-minority groups of midshipmen, the greater observed effect is that of declining orientations across time in the organization.

#### Socialization Tactics and Structural Position

The third research question looks at the effects of different forms of professional training and indoctrination experienced by midshipmen at different structural locations in the organization. **Hypothesis SIX** states that *greater change in the orientations of midshipmen occurs during plebe summer, the severe initial indoctrination to the organization, rather than during subsequent summer professional training periods, when training is less severe, less structured, and more informal.*

#### **Hypothesis SIX is not confirmed.**

Plebes expressed the most idealistic orientations, the strongest work beliefs, and the most positive military attitudes at the beginning and at the end of Plebe Summer indoctrination; however, like other academic cohorts at the Naval Academy, their orientations decreased from wave 1 to wave 2. Overall, Plebes changed more than other academic classes on several job values scales, but changes were towards greater realism in their orientations rather than towards optimism and greater congruence with organizational values. In addition, there were no significant changes in the mean military role identity salience measures for Plebes during indoctrination to the organization.

Changes were also observed in the job values and work beliefs of midshipmen who participated in upperclass summer training programs, but the changes were similar to those observed in the Plebe group. From the cross-sectional and longitudinal data initially tested, there does not appear to be a significant effect for different types of

midshipman summer training programs. However, post hoc analysis of midshipmen orientations from wave 1-2 by officer role identity and work belief groups showed significant and positive change in the orientations of midshipmen in the group with the most organizationally congruent work beliefs and role identity at wave 2. For example, in the greater congruence or “fit” group, there were statistically significant decreases from wave 1 to wave 2 in the leisure and security job values and a statistically significant increase in the work beliefs of midshipmen. In addition, the wave 1 to wave 2 officer role identity salience increased significantly for Plebes in this same group. While this hypothesis is not confirmed for the overall sample of midshipmen, for those midshipmen who expressed the most congruent orientations at the end of summer training, significant and positive change occurred in their orientations from wave 1 to wave 2.

**Hypothesis SEVEN** states that *midshipman role identity salience will increase most because of the initial indoctrination and socialization of plebe summer and formal assumption of this role.*

**Hypothesis SEVEN is not confirmed.**

While the overall midshipman role identity salience of Plebes increases from wave 1 to wave 2, the observed change is not statistically significant. For groups of midshipmen with greater time in the organization, the midshipmen role identity salience is lower and a statistically significant difference exists between midshipman role identity salience in the Plebe and First Class midshipmen groups at wave 2. Midshipman role identity appears to be associated only with anticipatory socialization in newcomers and from that point on is neither related to organizational outcomes nor significantly influenced by organizational socialization.



**Hypothesis EIGHT** states that *other military role identity salience will increase for midshipmen as they progress through the organization and are exposed to a greater number and diversity of military role models and leaders and as a result of anticipatory socialization to the roles to be assumed upon graduation from the Academy.*

**Hypothesis EIGHT is partially confirmed.**

In the cross-sectional analysis of midshipmen academic groups, the leader role identity is more salient for groups with more time in the organization, while the salience of the future military officer role identity remains relatively constant between Plebes and those groups closest to graduation and the assumption of new roles. For minority midshipmen by academic group, the officer role identity is greater for midshipmen closer to graduation, while the leader role identity appears to decrease as more time is spent in the organization. For women midshipmen, the opposite trend is observed and those women closest to graduation express more salient leader identities, while the salience of the officer role identity is more salient for groups with the less time invested in the organization.

In post hoc analysis of the group of midshipmen with higher congruence or “fit”, those who have spent the most time in the organization and who have assumed an obligation to serve in the military expressed significantly higher wave 2 officer role identity salience than newcomers to the organization. This finding supports the hypothesized effect for greater time in the organization increasing other role identity salience, as well as the idea that midshipmen committed to a future work role in the organization engage in anticipatory socialization as they near the assumption of this new role.

### Socialization, Orientations, and Outcome Measures

The fourth research question utilizes the hypothesized model of organizational socialization to understand the relationship between prior orientations and experiences, several aspects of the Naval Academy environment, change in orientations over the summer professional training period, and individual and organizational outcome variables associated with better organizational “fit”. **Hypothesis NINE** states that due to the relationship between identity salience and positive role behavior, *higher midshipmen role identity salience will predict individual role appropriate behaviors, such as higher leadership role scores and higher academic and military performance ratings*. In addition, **Hypothesis TEN** states that *higher midshipmen role identity salience will also predict higher organizational outcomes such as, greater likelihood of selecting military work at age 30, higher expected satisfaction with military work, and more certain plans to make the military a career*.

#### **Hypothesis NINE and Hypothesis TEN are not confirmed.**

Midshipmen role identity salience is highest for incoming Plebes and is much lower for groups of midshipmen with more time in the organization. From this and other results, higher midshipman role identity salience appears to be related to anticipatory socialization in newcomers to the organization. As a result, midshipmen role identity salience fails to predict significantly any individual or organizational outcome measures in the data. The individual performance and leadership outcome measures are predicted best by the prior experiences, demographics, and work orientations of midshipmen, while the officer and service role identities significantly predict lower academic performance in midshipmen. However, the future military officer role identity and attitudes that reflect greater congruence between individual and organizational orientations significantly

predict both higher odds of selecting military work at age 30 and more certain long-term military career expectations in midshipmen. Therefore, it is not the midshipman role identity that matters most in the individual and organizational outcomes of midshipmen, but the future military officer role identity.

**Hypothesis ELEVEN** states that *strong work beliefs and high military role identity salience will result in the greatest congruence in organizational values, or best “fit” and will be the strongest predictors of military occupational choice, military job satisfaction, and with long-term expectations to make the military a career.*

**Hypothesis ELEVEN is partially confirmed.**

While work beliefs and future military officer role identity are significant predictors of occupational choice and long-term career expectations in midshipmen, only work beliefs predict greater expected job satisfaction with military work at age 30. It appears that officer role identity and work beliefs reflect the inward orientation, or personal work identity of midshipmen towards the present tasks associated with a Naval Academy education and the future challenges of military work, as well as an outward orientation and evaluation of the future work tasks and roles of a junior military officer. As such, the relationship between work beliefs and officer role identity salience measures the “fit” or congruence between individual and organizational goals and values. The stronger the work beliefs and the more salient the future military officer role identity in midshipmen, the better the “fit”. As post hoc analysis revealed, midshipmen with the most congruent orientations at wave 2 exhibited the greatest odds of selecting military work, expressed the most positive attitudes about job satisfaction in the military, and held the most certain long-term military career orientations. Across all of the regression

models, the single most influential predictor of the three organizational outcome variables is neither work beliefs nor officer role identity salience, but the personal belief or central value of the importance of military service. It is not surprising that midshipmen who express high officer role identity salience and strong work beliefs hold the strongest beliefs that military service is important. This particular belief underscores the relationship between a transsituational, personal military identity and the congruence between specific organizational and individual orientations.

**Hypothesis TWELVE**, states that *the relationship between strong work beliefs, high military role identity salience, and organizational outcomes will hold regardless of midshipman gender or minority status.*

**Hypothesis TWELVE is not confirmed.**

In the regression analysis of military career orientations on the organizational socialization model for women and minority status midshipmen, the future military officer role identity salience failed to predict more certain career plans in either model and in the case of minority midshipmen, work beliefs were not a significant predictor of career plans either. In both models, however, the personal belief that military service is important was the strongest predictor of long-term career expectations. What both of these models indicate is that, while beliefs about military service reflect greater congruence, or “fit” between individual and organizational values, the meaning of these beliefs are derived in different ways by women and minority midshipmen. To understand the impact of this finding and the other findings the next section returns to the theory and review of the literature.

## **Conclusions and Contributions to Previous Research**

This project developed a theoretical framework that began with the origins and schools of thought related to the socialization of individuals in society because this paper's *central concern is to understand the effects of organizations and institutional values on individuals through the process of organizational socialization at the U.S. Naval Academy*. Life course theory (Elder 1995) provides an overarching framework through which the effects of social structure and personality, role theory, and interactionism inform the processes at work in this organizational context. Specifically, this study focused on the changes and congruence, or “fit” between group members and organizational orientations resulting from the integration of individuals to an organization as well as the subsequent relationships connecting individual orientations to organizational outcomes. To accomplish this, the research investigated the differences and changes in the orientations of midshipmen at different points in the process of becoming full and participating members of the Academy organization.

Following the “classic” or old institutionalist approach to organizations, institutional values are viewed as widely held and accepted orientations that play an important role in the process of instilling a collective and individual role identity in individuals as well as in promoting the outcomes of socialization in the organization (Caplow 1964; Fogarty and Dirsmith 2001). In addition, the modes and processes of socialization described by Caplow (1964) and studied throughout the socialization stage and tactics literatures (Feldman 1981; Levine and Moreland 2001; Van Maanen 1975) provide a basic understanding of how individuals approach and enter the organization and what processes occur as they become members and take part in the activities of the organization.

Central to the process of socialization and to this research is the transition of individuals to organizational roles, in this case the midshipman role and the future military officer role. As originally defined, a role identity is the internalized designation of the self associated with structured role relationships (Stryker 1990) and refers to the present organizational training role of midshipman and to the prospective or outcome role of future military officer. A central concept in identity theory is commitment and, through motivation and internalized values, it has been shown to ultimately shape behavior (Hitlin 2003; Stryker and Burke 2000). Stryker's (1990:24-25) hypotheses related to greater identity commitment state that individuals who are more committed to an identity will express positive attitudes about the identity and be more likely to rate the identity as salient, or important to them. Likewise, Stryker (1990) hypothesizes that the more committed one is to an identity associated with an organization or occupation, the more likely an individual will express orientations congruent to the institutional values and norms and the more likely the individual will participate in and seek out organizational activities that reinforce the identity. Each of these hypotheses has been brought to light in the results of this study.

Stryker's hypotheses (1990) emphasize the individual (*identification of*) and group (*identification with*) dimensions of identity theory and social identity theory (Gecas 1990; Gecas and Burke 1995; Hogg, Terry, and White 1995) and help explain the processes of role identity formation in midshipmen and the effects of organizational socialization at the Naval Academy. However, the formation and socialization of individual and group or organizational identities is a complex situation that requires additional considerations described through the lens of life course theory. These

considerations include the major life transitions of youth leaving home and school and passing through differing educational and occupational trajectories to the world and roles of adulthood (Wells and Stryker 1988) and well as the social structural and environmental factors that influence individuals along the way.

Hitlin (2003) provided a theoretical link between individual role and group identities and commitment, by suggesting that a common thread through both identity theory and social identity theory is the concept of a values-based personal identity. The personal identity is linked to individual values and serves as an integrating and motivating force between an individual's role and social identities that generates commitment and is predictive of behavior in specific roles (Hitlin 2003). This study hypothesized the existence and development of a personal identity associated with work and military service. The development of this transsituational work/military personal identity, or professional military career orientation, was studied through the differences and changes in personal and military work orientations, as well as in the individual and organizational outcomes of the midshipman socialization experience at Annapolis.

Applying this theoretical framework to the organizational socialization of Naval Academy midshipmen, three basic conclusions emerge from the research. First, newcomers to an organization like the Naval Academy, where the goals and values of the organization are very visible and influential, but the process of organizational entry is difficult and uncertain, prepare themselves for entry by selecting into organizations that match their current orientations or, through a process of anticipatory socialization, adopt the prevailing organizational orientations. At the time of their arrival, newcomers to the Naval Academy express different values, beliefs, and attitudes from the civilian high

school peers they left behind, but they also express very different orientations from midshipmen who have been in the organization longer.

From the literature on the stages of organizational socialization (Feldman 1976; 1981), newcomers struggle to evaluate the goals and values of the organization with limited and often inaccurate information and evaluations about the organization. For incoming Plebes at the Naval Academy, their anticipatory socialization and self-selection efforts result in the expression of more idealistic work orientations than any civilian high school peer group or group of midshipmen with greater time in the organization. The results associated with the tests for differences in the orientations of Plebes and civilian peers underscore the influence of the selection process at narrowing the field of potential candidates, as well as the self-selection and anticipatory socialization effects that shape the job values, work beliefs, and military attitudes of incoming midshipmen. These effects have been well described in organizational socialization theory (Caplow 1964) and tested in the literature on stage-based processes of organizational socialization and the research on organizational entry and congruence or “fit” (Chatman 1989; Feldman 1976; Feldman 1982; Kraimer 1997; Van Maanen 1975). This theory and research provides background and helps explain the orientations of newcomers upon arrival at the Academy and immersion in this new role of midshipman. The present study expanded the research on organizational entry to a military training and education context and provided a detailed analysis of the observed differences in midshipmen and civilian orientations as well as the self-selection effects associated with educational and occupational trajectories.



One of the most common conceptions of the Naval Academy socialization process is that it is based on mortification or doing away with former identities and orientations and instilling organizationally sanctioned values, attitudes, and behaviors through the total institution model (Caplow 1964; Goffman 1960). While many of the outward physical aspects of the initial indoctrination and training of new midshipmen resemble the total institution, plebe summer and subsequent academic year training of Plebes shares very little in common with the classic conceptualization (Rosa and Stevens 1986). The changes observed in midshipman orientations towards greater realism and the lack of significant differences in the most salient role identities from wave 1 to wave 2 demonstrate the limited influence of a total institution conceptualization in this context.

While there is no question that the midshipmen undergoing the rigors of plebe summer indoctrination experience a stressful and demanding environment, the changes in orientations of midshipmen during this period do not reflect the uniformity of outcomes expected under conditions of a total institution. The consistency observed in the orientations of newcomers to this organization is a largely a function of the self-selection and anticipatory socialization of individuals before they arrive in Annapolis. As hypothesized by Schneider (1987), the restricted range of membership in this organization helps explain the orientations of Plebes as they begin training and, as Chatman (1989) hypothesized, the self-selection and selection processes observed in this sample of midshipmen explain greater variance in person-organization “fit” at earlier stages of integration. One need only observe the general trend toward greater realism among orientations and the strength of the religion, family member, and friend role identities among the Plebes from wave 1 to wave 2 to understand the relative inability of

the organization to change the overall orientations of midshipmen. This finding however, is only the beginning of the story regarding organizational socialization and the orientations of midshipmen.

The second primary finding in this research is that the prior experiences and orientations of newcomers to the Naval Academy, especially experiences that provide accurate information about the organization, explain better organizational “fit” at entry. In this research, organizational congruence or “fit” is expressed in terms of higher officer role identity salience, stronger work beliefs, and placing greater individual value in military service, which results in greater certainty in long-term career expectations. Previous literature on organizational socialization and organizational psychology has demonstrated the importance “fit” or congruence at predicting positive individual and organizational outcomes and has hypothesized that better fit could be achieved by exposure to accurate information about the organization prior to entry (Feldman 1976; Feldman 1981; Chatman 1989; Chatman 1991; Kraimer 1997; Schneider 1987).

This study expanded the knowledge about organizational congruence by emphasizing the impact of background characteristics, prior experiences, and prior orientations on the “fit” of newcomers to the Naval Academy. Instead of focusing solely on the processes of socialization at the Academy, this study included the prior experiences and orientations of individuals as a way to understand the social structural effects on orientations and the interaction of individual and environment in the process of socialization. This research confirmed the hypothesized relationship between experiences prior to organizational entry and person-organization congruence (Chatman 1991; Kraimer 1997) by showing that experiences such as attending Summer Seminar,

prior military service, and being the child of a military parent significantly predicted role identity and career orientations in newcomers to the organization. In addition, this study extended the organizational congruence literature by incorporating role identity salience as a measure of individual value congruence and by demonstrating that the hypothesized relationship between work beliefs and organizational values exists in the value-laden professional education and training environment of the Naval Academy.

The third and, perhaps, most important finding among these results is that greater congruence or “fit” between the individual and the organization results in the most positive organizational outcomes in midshipmen. These results partly answer the initial question about whether or not organizational socialization affects midshipmen orientations by showing that increases in certain variables predicted outcomes associated with greater “fit”. A related and no less important finding is that “fit” is a function of individual characteristics, orientations, and experiences that differs by gender and minority group status, among other things. For most midshipmen, the data suggest that as they attend the Naval Academy their orientations, plans, and preferences become more realistic, less positive, and more uncertain than when they entered the organization as idealistic and inexperienced Plebes. However, there is no reason for alarm in such findings as similar effects have been observed in research on youth orientations (Johnson 2001; Johnson and Elder 2002), literature studying the effects associated with attending college (Astin 1993; Pascarella and Terenzini 1991), and in studies of values among West Point cadets (Hammill et al. 1995; Lovell 1964; Priest and Beach 1998; Stevens et al 1994). This research has confirmed and extended the findings in the college effects and job values literatures that youth become more independent and pragmatic in their

attitudes and views during the years they attend college, including attending a military college (Astin 1993; Hammill et al. 1995; Johnson 2001; Johnson and Elder 2002; Lovell 1964; Pascarella and Terenzini 1991; Priest and Beach 1998; Stevens et al 1994).

Contrary to these general outcomes and the findings in the broader literature, a number of midshipmen expressed orientations that were more congruent at wave 2 than at wave 1. These individuals prefer the characteristics of work traditionally associated with the military, indicate that work and military service are central and important to them, express positive attitudes about future military work, and hold the role identity associated with this work as salient. The results show that the orientations of this group of midshipmen actually become more congruent with the organization's goals over time and demonstrate the most positive individual and organizational outcomes in the process of socialization at the Naval Academy. Thus, there are midshipmen whose orientations appear to be changed by the organization and the results provide substantive answers to the initial research question. As a result, the remaining unanswered question in this study is to determine the characteristics of these midshipmen or identify unique experiences that foster greater congruence or "fit" in them despite the general trend of midshipmen orientations in the opposite direction.

One answer may be found in the classic research on the professional orientations of medical students in training conducted more than forty years ago. In one organizational context, individuals were treated as medical professionals and perceived themselves as "physicians-in-training" and in this case they shared the professional values and ideals of their professors and mentors and exhibited positive organizational orientations and career outcomes (Bloom 1979; Merton et al. 1957). Conversely,

individuals in the other organizational context were treated as unqualified and untrained students rather than as professionals and this group held the least positive organizational and career outlooks and shared fewer orientations with the prevailing medical profession (Becker et al. 1961; Bloom 1979). In addition, while the subjects in the “student” context considered themselves future doctors, they were more concerned with getting out of the educational environment and beginning their real training in a medical practice, whereas the subjects in the “physician” context expressed satisfaction with their present environment and confidence in their abilities as doctors upon leaving school (Bloom 1979).

As in the research on the medical profession, it may be that midshipmen who possess certain characteristics or have had particular experiences before or during their tenure at the Academy believe they are “officers-in-training” rather than “midshipmen-in-waiting”. As a result, this group is most likely to accept the socialization process of the Naval Academy by internalizing the values, attitudes, role identities, and occupational preferences associated with military work. In addition, the orientations of these midshipmen are most congruent to the organization and the outcomes they exhibit are most positive. Somehow the midshipmen in the high congruence or “fit” group possess or have developed a stronger work/military personal identity than their peers and the key to understanding organizational socialization at the Naval Academy lies in discovering what activates and influences this set of orientations.

The present research has begun to explicate this issue and has extended Hitlin’s (2003) identity-value research by demonstrating that those midshipmen who believe they are future military officers are more likely to hold a stronger work/military personal

identity that is unified, cohesive, and transsituational, across academic classes and from wave 1 to wave 2. By bringing together the congruence concepts from organizational socialization (Chatman 1991; Kraimer 1997) and the common frame of reference from identity theory (Burke and Reitzes 1991) job values, work beliefs, and work role identity salience are confirmed as significant predictors of role behaviors related to a salient organizational identity (Callero 1985; Stryker 1990). Likewise, as Hitlin (2003) predicted, this research has established that values and personal identity are subject to change over time and it appears that the process of organizational socialization in individuals with a strong work/military personal identity is more likely to result in the positive outcomes associated with military work.

Ultimately, the goals of socialization in the “classic” sense are to generate greater congruence, or “fit” between individual and organization (Caplow 1964; Chatman 1991; Fogarty and Dirsmith 2001; Kraimer 1997) in order to ensure organizational priorities are met. One of the clearest tests of successful socialization or integration of members is in the satisfaction and commitment to the organization expressed by individuals (Chatman 1991; Feldman 1981; Kraimer 1997; Schneider 1987). In the case of socialization to military service, a unique and value-laden form of work, the greatest “fit” is also measured by the development of a strong work/military personal identity. Each of these considerations has been confirmed in this study and are highlighted in the matrix of role identity and work beliefs in Figure 10.1.

**Figure 10.1 Midshipmen Role Identity and Work Belief Strength Outcomes**

		<b>Work Beliefs</b>	
		Weak	Strong
<b>Officer Identity Salience</b>	High	<ul style="list-style-type: none"> <li>•Yes Military Job at Age 30</li> <li>•Medium Job Satisfaction</li> <li>•Uncertain Military Career</li> </ul>	<ul style="list-style-type: none"> <li>•Yes Military Job at Age 30</li> <li>•High Job Satisfaction</li> <li>•Yes Military Career</li> </ul>
	Low	<ul style="list-style-type: none"> <li>•No Military Job At Age 30</li> <li>•Low Job Satisfaction</li> <li>•No Military Career</li> </ul>	<ul style="list-style-type: none"> <li>•Uncertain Military Job at Age 30</li> <li>•Medium Job Satisfaction</li> <li>•No Military Career</li> </ul>

In summary, this research has shown that individual and institutional values as well as role and group identities are linked through the processes of selection, self-selection, anticipatory socialization, and socialization to the attainment of individual and organizational outcomes. “Classic” or old institutionalism hypothesizes that the contributions of individuals and the influence of values are central to the operation of the organization and the achievement of its goals and objectives (Caplow 1964). By understanding the development of a work/military personal identity in midshipmen, this research has also shown that one key organizational goal of a Naval Academy education might be achieved through organizational socialization. That goal is “to provide graduates who are dedicated to a career of naval service” (Office of the Superintendent 2002-2003). The socialization of individual identification with the future work role

identity and the emergence of strong work beliefs has unlocked, at least partially, the transformational process of becoming a naval officer.

### **Limitations of the Study**

This research provides empirical evidence supporting the conclusion that midshipmen differ significantly from their civilian peers. In addition, the data suggest that for some midshipmen, attending the Naval Academy results in a change in their occupational orientations, towards greater organizational congruence. Furthermore, the research identified numerous factors that significantly influence midshipmen orientations. Finally, the results have shown that the effects of organizational socialization on midshipmen, while not distinctly visible, operate in different ways among different groups of individuals to promote varying levels of congruence in individual and organizational values. Despite these findings and the conclusion that work beliefs and role identity salience contribute to greater congruence, or organizational “fit” in midshipmen, there are minor limitations in the data and in the research design that preclude the broadest generalization and strongest claims of certainty in these results.

First, this research is based on secondary analysis of survey research data collected in the absence of a causal model of socialization. To account for this limitation, the process of socialization was simulated by hierarchically grouping variables with implicit time constructs and by using several longitudinal measures. The organizational outcomes predicted in the models do not reflect causality because they were assessed concurrently with wave 2 orientations and project the plans, intentions, and job satisfaction of midshipmen 10 to 20 years in the future. Some causality can be predicted in the individual outcomes of academic and military performance and leadership roles,



since they are measured 4 months after wave two and the model accounts for structural changes in midshipmen from wave 1 to wave 2. However, causality cannot be fully explained because the model lacks greater explanation and specification of the effects of the Naval Academy environment, but many factors in the models are related to previous research that indicates propensity and positive attitudes are significantly associated with future behaviors (Ajzen 1991; Burke and Reitzes 1981; Hitlin 2003; Mortimer and Lorence 1979b; Segal et al. 1999; Stryker 1990).

The second limitation in the research is the inability to accurately account for the Naval Academy environment in the second stage of the regression analysis models. The variables that are included, with the exception of upperclass/underclass contrasts, are artificial constructs that fail to uncover the magnitude of environmental influences normally associated with college attendance (Astin 1993; Pascarella and Terenzini 1991). In addition, the number of environment considerations included in each model is limited and fails to adequately cover the range and depth of both formal and informal aspects of the environment that influence midshipmen orientations. The observation that organizational socialization affects the orientations of certain midshipmen highlights the need to explicate conditions associated with the Naval Academy environment.

Another limitation is related to the inherent bias in this sample of Naval Academy midshipmen that makes the generalizability of the results difficult beyond other professional and military educational settings. The restricted range of students attending the Naval Academy has been highlighted and, although midshipmen attend the Naval Academy from all parts of the country, this sample is a special case of the college effects and professional socialization research. In addition, the loss of respondents from wave 1

to wave 2 of the MAS biases the results toward more positive orientations and general attrition from the Naval Academy, although small, would seem to bias the sample toward greater congruence in orientations, although the results are opposite. Notwithstanding these limitations, the results are particularly useful in the study of professional socialization in other specialized college and training environments.

There is also the possibility that cohort effects associated with the comparison of Plebes and high school seniors from different graduating classes affected the comparisons, but the availability of data precluded any other design. The last limitation associated with the data involves the gender and racial/ethnic distribution of respondents in both the civilian and military samples. In the civilian sample, only African American and Caucasian categories are available for comparison and in the military sample, the distribution of race and ethnic minority is so low that the category was collapsed and analyzed as a general minority group. By collapsing these very different categories together to gain statistical power, much of substantive power to explain differences among groups is lost. Likewise, the number of women in the midshipmen sample is considerably less than the distribution of women in the high school and general college populations, but is reflective of the restricted range and self-selection effects associated with attending the Naval Academy. Despite these minor limitations, the data still highlights significant differences between civilian and military orientations and between academic classes at the Naval Academy, as well as gender and minority group differences that help inform the research questions.

## **Recommendations for Future Research**

As highlighted throughout this chapter, several of the relationships and findings are strong and persistent across varying situations and conditions and indicate the importance of this research in explaining the process of organizational socialization at the Naval Academy. A number of areas exist in which further study and research would validate and expand the field of organizational socialization addressed in this dissertation. The first recommendation is related to the research design. To fully understand the orientations of midshipmen and the effects of organizational socialization, future research should incorporate a longitudinal panel design from before individuals arrive at the Naval Academy to after graduation and the assumption of the officer role. Such research will provide depth and understanding to the process of organizational socialization of midshipmen. By addressing orientations before arrival, the influence of anticipatory socialization might be directly observed, but also the orientations of individuals who were not selected or chose not to attend provides a useful contrast to the orientations of midshipmen selected into the Academy.

In addition, future research should include other prior experiences that affect the orientations of midshipmen such as school and community background, family characteristics, religious beliefs, and political and social orientations. Since the comparison group is nationally representative and the midshipman population is drawn from across the country as well, some of these other considerations might inform the prior experiences and orientations constructs highlighted in this research. Likewise, there are other forms and sources of officer training and commissioning and a multi-organizational study of other military service academies and civilian college ROTC units would address not only the comparative effects of different college environments and

forms of training, but also the influence of different military cultures on the orientations of midshipmen and cadets. Likewise, future research would benefit from a comparison of other environments that either exhibit characteristics of the “total institution” or that demand strict adherence to organizationally defined values, norms, and behaviors, and contexts such as research conducted on individuals in prisons, seminaries, and fundamentalist religious colleges (Carroll 1971; Ventimiglia 1978; Welland 2001). In addition, the Naval Academy’s role in preparing its graduates for service in the value-laden military profession place this research within the realm of socialization in professional schools (Becker and Geer 1958; Bloom 1979; Schein 1967) and future research might include comparative studies of different professional school environments.

In terms of variables and constructs in future research, there is a need to investigate the formation and differing meanings of military role identities and the relationships among other salient role identities and various aspects of the environment as well as differences by gender and minority group. For instance, how a role identity is defined may ultimately determine what activates and causes a particular role identity to increase in midshipmen. Other potential effects in the development of role identity are the type and form of professional training, the observation of mentors and peers, and the content of leadership education at the Naval Academy. For example, midshipmen observing junior officers at work in a role, their interaction with officer instructors or the midshipman company officer, aspects of the leadership and professional education and training curriculum, or the influence of peer attitudes about the work roles may have significant effects on their orientations. Future research in this area might include focus

groups and open-ended surveys to provide the necessary insights into understanding the formation of this key construct.

Related to the identity of respondents, future research might also investigate other aspects of the self-concept or a combination of items such as identity, locus of control, self-esteem, or self-efficacy and the relationship of these constructs to the indoctrination and socialization of midshipmen at the Naval Academy. There is a literature on the association between college attendance and the self-concept (Astin 1993; Pascarella and Terenzini 1991) and future research that includes more aspects of midshipmen self-concept would contribute greater depth and understanding of socialization in this environment.

While this research advances the understanding of propensity to serve in the military (Segal et al. 1999) to future officers, additional research might also address the specific attitudes and preferences associated with the officer role rather than for items such as military justice and opportunity that address rewards more likely to appeal to enlisted personnel. In this way, the occupational choices and job values of midshipmen might be better understood through the motivators of officer opportunity.

Regardless of this study's level of generalization, it has provided a glimpse at what are conventionally believed to be dramatic effects of organization socialization. Furthermore, this research has extended the study of organizational socialization to include role identity and value formation, informing a broader understanding not only of the influence of the organization on the individual but also the organization-individual interaction. These results should be useful to a wide array of organizational and social psychologists and sociologists as well as being of particular of interest to military

sociology and the study military values and military identity formation. In addition, this study has broadened the scope of work orientations research to include the Naval Academy as a context. Finally, these results have expanded research on youth job values (Johnson 2001; Johnson and Elder 2002) to include work beliefs and role identity as a reflection of an underlying personal identity (Hitlin 2003).

### **Implications for Practice**

From a policy standpoint, these results provide military leaders and administrators with a better understanding of the effects of organizational socialization on the orientations, identity, and role preferences of military service academy members and serve as an important source of feedback on the overall process of officer and leadership development at the Naval Academy. This investigation of the transformational experiences from civilian to midshipman to military officer highlights the effects of the organization on individual development and the internalization of and identification with military roles, values, and culture.

In light of these findings and the recommendations for future research, it is possible that structural, cultural, and procedural changes might be implemented that would improve the process of organizational socialization at the Naval Academy in order to foster better “fit” and, ultimately, more positive organizational outcomes. Although changes might be categorized in different areas, the relationship between them and the general outcomes and goals of the organization are thought to be strong. Therefore, any plan to implement change should consider the interrelationships and follow-on effects associated with the primary goal of producing career-oriented professional naval officers.

Related to this, the first recommended change is, perhaps, the most important and most comprehensive and involves the theoretical and practical implications of training, education, and socialization at the Naval Academy. It is recommended that the stated mission of the Naval Academy be revised to acknowledge the importance and centrality of creating a personal work/military identity in midshipmen. For example, the mission statement of the Academy might be changed as follows:

“To develop midshipmen morally, mentally and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to provide graduates who *possess a professional officer orientation and* are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship and government.

Incorporating such a change would highlight to all constituents the primacy of this orientation in the process of organizational socialization at the Naval Academy and would clarify and focus the often-competing goals of balancing the educational and professional training needs of midshipmen. Likewise, from the research in this dissertation it is known that the midshipmen who hold the most congruent orientations, or exhibit the best “fit” with the organization express this professional officer orientation more than other midshipmen. The factors in this study that contribute to better “fit” and to an increase this personal identity fall into three general categories from least to most malleable or susceptibility to change: (1) occupational orientations; (2) prior experiences and conditions; and (3) role identities.

Among occupational orientations, work beliefs are more general and central and, in this research, were shown to change the least and exhibit greater stability than the job

values scales studied among different groups of midshipmen. Therefore, it is difficult to make recommendations as to how to increase the central beliefs about the importance of work, especially among a group of individuals who already express stronger work beliefs than most of their peers. Among the job values scales, preferences for the social altruism rewards of work had the greatest influence on the congruence or “fit” of midshipmen. Of the prior experiences of midshipmen, attendance at the Summer Seminar and having a military parent contributed most to congruent orientations and to the development of a professional military career orientation. Finally, the future military officer role identity proved to be a strong and consistent predictor of better “fit” among midshipmen. This role identity factor alone may be one of the most tangible elements associated with a professional military career orientation, or at a minimum one of the most effective indicators.

What might be done to capitalize on the elements in each of these categories in order to socialize midshipmen to the most congruent orientations and the expression of the strongest personal military/work identity? Because of the centrality and stability of occupational orientations and the likelihood of self-selection to the organization, steps in the admissions process might be undertaken to highlight the core work values and beliefs associated with attendance at the Naval Academy and their relationship to the ultimate occupational environment of military work. Informing individuals about the characteristics, demands, and rewards of the military work environment, providing a clear and accurate picture of the various types of individuals who succeed and prosper in this environment, and clearly identifying the roles associated with military work for individuals from diverse backgrounds will provide important information to applicants



and incoming midshipmen. This information will give them either greater confidence in their decision to pursue a career in the military or will help them to decide whether the rigors of Academy life and military work are compatible with their beliefs and values. Likewise, the Academy admissions process might include multiple relevant and reliable measures of individual occupational beliefs and values to highlight greater congruence in potential midshipmen. Not only do surveys of applicants provide a means to evaluate individuals but also recommendation forms and essays might be redesigned to include effective evaluation of these orientations.

Likewise, steps can be taken throughout the course of the four years in training to encourage a greater appreciation of, and potentially a preference for, the social altruism and influence rewards associated with military work. At a minimum, changes might involve a review of the four-year midshipman professional training program to incorporate and emphasize experiences and tasks that encourage decision-making, are considered worthwhile and challenging, and highlight the importance of interacting with and helping others. In addition, the professional training program might be revised to minimizing those experiences that emphasize or reward individual performance or individualism, have little relationship to professional officer roles, tasks, and responsibilities, and are ultimately unrelated to the goals of leadership development at the Academy.

Of the prior experiences studied in this dissertation, the Summer Seminar indoctrination experience had a positive effect on several factors related to the professional military career orientation. As a result, this experience should be studied closely to determine not only who attends this program but also what specific training

takes place to induce such positive outcomes in future midshipmen, thereby fostering these factors and perhaps including aspects in the formal midshipmen professional training program. Once these factors are understood, consideration might be given to increasing the capacity or frequency of seminar sessions each year to gain greater throughput of students. In addition, although the tuition to attend the seminar is not excessive (\$300), the combination of tuition and travel costs might prohibit some worthy individuals from applying and attending this important program. Consideration also might be given to offering Naval Academy Foundation aid to deserving individuals in order to attract the most diverse applicant base to this important and influential indoctrination program.

In this research, the future officer role identity was found to be an important outcome and predictor variable in the process of organizational socialization in midshipmen. Equally important, is the fact that this role identity is one of the more malleable, or changeable, aspects of the professional military career orientation and is likely a developmental or stage-based process. Similar to the research on professional medical education, changes might be incorporated in both the structure and process of socialization at the Academy to highlight the progress made toward the assumption of the future military officer role identity rather than other potential or competing role identities. For instance, instead of focusing on a rigid four-class system, the program of indoctrination and assimilation might be revised to emphasize and recognize different structural characteristics associated with greater tenure in the organization. There are many ways and means to incorporate such change and a few basic ideas are suggested below.

As midshipmen enter the organization, they make a choice to follow a path to professional service and military work. At present, this path assumes a ritual initiation to the organization and process of mortification and training during plebe summer that results in the individual fully assuming the role of midshipman while becoming only a nominal member of the organization. Although the midshipman role identity has been assumed, full membership in the organization is delayed until the completion of another ritual process at the end of the Plebe academic year. It is not surprising then why the midshipman role identity appears to drop so precipitously following the plebe year. The role identity that individuals assumed at organizational entry and held for an entire year is perhaps viewed as no longer relevant to serving as a full member in the organization and, in fact, this identity is related to an experience none of them wants to ever repeat. In addition, the second and third years in residence seem to be spent in limbo; waiting, searching, and observing for possible meaning in the experiences of Academy life, but perhaps knowing that it is not until the final year in residence that the meaningful role of midshipman will be resumed. When that final year at the Academy comes, opportunities to work and to lead are provided to individuals, but by this point in time, many of them may have begun to set their sights on the reality and challenges of graduation and military work and they may fail to see the value in the training experiences of the Academy.

A recommendation might be to revise the process of training and education from learning and doing as inexperienced midshipmen to understanding and appreciating the role and profession of officership and the responsibilities associated with the assumption of this future role. Myriad changes might be incorporated that activate or foster the

emergence of the officer role identity, but at a minimum the four-class system might be revised to recognize the choice one makes to follow the path to officership at first, and then the commitment one makes to serve in the military. The logical break in this process occurs between the second and third years in residence when midshipmen incur a military obligation. Likewise, the process of newcomer indoctrination and assimilation might be reorganized and spread across two years rather than one year, as is the case now. This could include changes in the mortification process of plebe year that gradually decrease the intensity and/or duration of the experience to reduce the negative connotation associated with the newcomer midshipman role. This two-class process might foster the orientations of the upperclass midshipmen as officers-in-training and could incorporate aspects of the culture normally associated with the officer role, such as different uniforms and insignias and more junior officer responsibilities. Equally important, however, might be the gradual assimilation of newcomers to the organization in a way that underclass midshipmen come to desire rather than reject the upperclass midshipman role because it is associated with future military officer work, not because it is something other than a Plebe.

The final important consideration for practice concerns the socialization, persistence, and ultimate success of minority groups (gender, racial, and ethnic) at the Academy. This research has highlighted the fact that not only do women and certain minority groups hold lower persistence rates than their male majority peers at the Naval Academy, they are also more likely to experience lower individual and organizational outcome measures. This problem could be a function of an organizational culture and socialization process that is designed for homogeneity despite the fact that there is great

diversity among midshipmen. It could also be that the personal identity associated with military service and work emerges in different groups of midshipmen in different ways. Conducting the necessary in-depth research in this area, with a focus on the substance of military service and role identities for women and minorities is a small first step toward understanding and remedying both the persistence and organizational outcome problems. Specifically, research should be conducted that identifies aspects of the formal and informal culture and socialization process that influence (both positive and negative) the personal identity development in women and minority group midshipmen. The ultimate goal of research and potential change should be to foster a culture at the Academy that values military service by all, recognizes the important and unique contributions different groups make, and defines the roles associated with organizational socialization and future military work in realistic and important ways for all midshipmen: first as a choice and then as a commitment. Consideration, improvement, and implementation of these and other recommendations, might realize substantial gains in the process of officer and leader development at the Academy. Thus, in a “classic” institutional sense, the organization might be brought closer to achieving its objectives, goals, and values.

In sum, this study has expanded and integrated the literature and research on organizational socialization, values, and identity and provided insights into the diverse ways midshipmen view the roles they will assume upon graduation and commissioning in the U.S. Navy and Marine Corps. The task ahead is for future research to fully develop and test the model of organizational socialization of midshipmen at the Naval Academy in order to understand and expand the body of knowledge of the four years spent along the Severn.

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